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GENERA
OF
BIRDS.



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A D V E R T I S E M E N T.

THIS trifle was written in the year 1772, and presented to Doctor ROBERT RAMSAY, Professor of Natural History in *Edinburgh*, for the use of the class over which he presided. He printed one impression in the following year; and then resigned to me the copy.

DEATH deprived the community of a worthy member, in the loss of my friend, on *December 15th, 1778*. I suffer the Dedication to remain in this edition, as a small monument to his memory; and of the esteem in which I held a gentleman, ever active in all good offices to

DOWNING,
Dec. 20th, 1780.

THOMAS PENNANT.

M O T O I D E O
ROBERT RAMSAY, M.D.

FELLOW OF THE ROYAL COLLEGE OF PHYSICIANS,

AND

PROFESSOR OF NATURAL HISTORY IN THE UNIVERSITY OF EDINBURGH.

DEAR SIR,

I THINK myself happy in having an opportunity of giving you this mark of the sense I have of your steady friendship, from its origin, in 1769, to the present moment. From the beginning, it has proved a regular series of good offices: You never considered me with the jealousy of a Rival courting the same Mistress; but, with uncommon generosity, promoted all my pursuits after DAME NATURE, whether she retired to the depths of the *Highland Glens*, or lurked amidst the intricate groups of the stormy *Hebrides*. If, in my late expedition, she has granted me any favors (for she proved rather coy) she humbled me by saying, that I was indebted to you for them. So that I find myself bound to make public acknowledgements of advantages acquired by means of the clue you gave of arriving at the few I have obtained.

Not-

D E D I C A T I O N.

NOTWITHSTANDING I own your power with the Lady on your side of the *Tweed*, yet I never can be induced to omit any opportunity of recommending myself to her good graces, and, with you, must ever remain a warm admirer of her universal charms. But the following *analysis* of one which captivates me most, is now offered to you, with the hopes of meeting with your approbation, and that of the several votaries who depend on you for a more intimate acquaintance with her various beauties. Long may you enjoy health, and every happiness, to perform so agreeable a task: May you be successful in extending her empire: Good fortune attend you in each of her haunts, whether she affects the air, the woods, or the fields; whether, like an *Oread*, she treads *jocund on the misty mountain's top*; or a *Naiad*, sporting in your rapid streams. Again, success attend you every where; and may none but BIRDS of good omen flutter round you.

Sis licet felix ubicunque mavis,

Et memor nostri, mihi care, vivas:

Teque nec lævus vetet ire Picus,

Nec vaga CORNIX.

DOWNING,

JAN. 1, 1773.

THOMAS PENNANT.

P R E F A C E.

ORNITHOLOGY is a science which treats of Birds; describes their form, external and internal; and teaches their economy and their uses.

A BIRD is an animal covered with feathers; furnished with a bill; having two wings, and only two legs; with the faculty, except in very few instances, of removing itself from place to place through the air.

External Parts of BIRDS.

A BIRD may be divided into HEAD, BODY, and LIMBS.

H E A D,

Rostrum, or bill, is a hard horny substance, consisting of an upper and under part, extending from the head, and answering to the mandibles in quadrupeds. Its edges generally plain and sharp, like the edge of a knife, *cultrated**, as the bills of Crows; but sometimes *ferrated*, as in the TOUCAN; or *jagged*, as in the CAN-

* This and other terms are explained by figures in the BRITISH ZOOLOGY, vol. 1. tab. xv. A few terms are explained from the figure on the title.

NET and some HERONS; or *pellinated*, as in the DUCK; or *denticulated*, as in the MERGANSERS; but always destitute of real teeth immersed in sockets.

THE base in FALCONS is covered with a naked skin or CERE (CERA;) in some birds with a caraneous appendage, as the TURKEY; or a callous, as the CURASSO.

IN birds of prey, the bill is hooked at the end, and fit for tearing: in CROWS, strait and strong, for picking: in water-fowl, either long and pointed, for striking; or slender and blunt, for searching in the mire; or flat and broad, for gobbling. Its other uses are for building nests; feeding the young; climbing, as in PARROTS; or, lastly, as an instrument of defence, or offence.

NOSTRILS.

(*Nares*) the nice instruments of discerning their food, are placed either in the middle of the upper mandible, or near the base, or at the base, as in PARROTS; or behind the base, as in TOUCANS and HORN BILLS: but some birds, as the GANNET, are destitute of nostrils. The nostrils are generally naked, but sometimes covered with bristles reflected over them, as in CROWS; or hid in the feathers, as in PARROTS, &c.

PARTS OF THE HEAD.

THE forepart of the head is called the FRONT (*Capistrum*;) the summit (*vertex*) or the crown: the hind part, with the next joint of the neck (*nucha*) the nape: the space between the bill and the eyes, which in HERONS, GREBS, &c. is naked (*loru*) the straps: the space beneath the eyes (*genae*) the cheeks.

ORBITS.

(*Orbitae*) the eye-lids; in some birds naked, in others covered with short soft feathers.

BIRDS have no eye-brows: but the Grouse kind have in lieu a scarlet naked skin above, which are called *supercilia*; the same word

P R E F A C E.

iii

word is also applied to any line of a different color that passes from the bill over the eyes.

BIRDS are destitute of *auricles*, or external ears, having an orifice for admission of sound, open in all, but OWLS, whose ears are furnished with valves.

EARS.

THE chin, the space between the parts of the lower mandible and the neck, is generally covered with feathers; but in the COCK, and some others, have carneous appendages, called WATTLES (*Papillæ*;) in others, is naked, and furnished with a POUCH, capable of great dilatation (*Sacculus*) as in the PELICAN and CORVORANTS.

CHIN.

(*Collum*) the part that connects the head to the body, is longer in birds than any other animals; and longer in such as have long legs than those that have short, either for gathering up their meat from the ground, or striking their prey in the water, except in web-footed fowl, which are, by reversing their bodies, destined to search for food at the bottom of waters, as SWANS, and the like. Birds, especially those that have a long neck, have the power of retracting, bending, or stretching it out, in order to change their center of gravity from their legs to their wings.

NECK.

B O D Y.

CONSISTS of the BACK (*Dorsum*) which is flat, strait, and inclines, terminated by the

BACK.

(*Uropygium*) furnished with two glands, secreting a fatty liquor from an orifice with which each is furnished: and which the birds express with their bills, to oil or anoint the discomposed parts of their feathers. These glands are particularly large in most web-footed water-fowl; but in the GAZES, which want tails, they are smaller.

RUMP.

B 2

(*Pectus*)

BREAST.

(*Pectus*) is ridged and very muscular, defended by a forked bone (*clavicula*) the MERRY THOUGHT.

THE short-winged birds, such as Grouse, &c. have their breasts most fleshy or muscular; as they require greater powers in flying than the long-winged birds, such as GULLS, HERONS, which are specifically lighter, and have greater extent of sail.

BELLY.

(*Abdomen*) is covered with a strong skin, and contains the entrails.

VENT.

THE VENT, or vent-feathers (*Crissum*) which lies between the thighs and the tail. The ANUS lies hid in those feathers.

L I M B S.

WINGS.

WINGS (*Alae*) adapted for flight in all birds, except the DODO, OSTRICHES, great AUK, and the PINGUINS, whose wings are too short for the use of flying; but in the DODO and OSTRICH, when extended, serve to accelerate their motion in running; and in the PINGUINS perform the office of fins, in swimming or diving.

BASTARD WING.

THE wings have near their end an appendage covered with four or five feathers, called the BASTARD WING (*ala natba*) and *alula spuria*.

LESSER COVERTS.

THE lesser coverts (*tectrices*) are the feathers which lie on the bones of the wings.

GREATER COVERTS.

THE greater coverts are those which lie beneath the former, and cover the quill-feathers and the secondaries.

QUILL-FEATHERS.

THE Quill-feathers (*primores*) spring from the first bones (*digiti* and *metacarpi*) of the wings, and are ten in number.

QUILL-feathers are broader on their inner than exterior sides.

SECONDARIES.

THE SECONDARIES (*secundariae*) are those that rise from the second

P R E F A C E.

cond part (*cubitus*) and are about eighteen in number, are equally broad on both sides. The primary and secondary wing-feathers are called REMIGES.

A TUFT of feathers placed beyond the secondaries, near the junction of the wings with the body. This, in water-fowl, is generally longer than the secondaries, and cuneiform.

THE SCAPULARS are a tuft of long feathers arising near the junction of the wings (*brachia*) with the body, and lie along the sides of the back, but may be easily distinguished, and raised with one's finger.

THE INNER COVERTS are those that clothe the under side of the wing.

THE SUBAXILLARY are peculiar to the greater PARADISE.

THE wings of some birds are instruments of offence; the ANHIMA of *Marcgrave* has two strong spines in the front of each wing, a species of Plover, *Edw.* tab. 47. and 280. has a single one on each; the whole tribe of JACANA, and the GAMBO, or spur-winged Goose of Mr. *Willughby*, the same.

THE TAIL is the director, or rudder, of birds in their flight; they rise, sink, or turn by its means; for, when the head points one way, the tail inclines to the other side: it is, besides, an *equilibrium* or counterpoise to the other parts; the use is very evident in the KITE and SWALLOWS.

THE TAIL consists of strong feathers (*rectrices*) ten in number, as in the WOODPECKERS, &c. twelve in the HAWK tribe, and many others: the GALLINACEOUS, the MERGANSERS, and DUCK kind, of more.

TERTIALS.

SCAPULARS.

INNER COVERTS.

SUBAXILLARY
FEATHERS.

TAIL.

P R E F A C E.

It is either even at the end, as in most birds, or forked, as in SWALLOWS, &c. or cuneated, as in MAGPIES, &c. or rounded, as in the PURPLE JACKDAW of *Catesby*. The GREBE is destitute of a tail, the rump being covered with down; and that of the CASSOWARY with the feathers of the back.

IMMEDIATELY OVER the tail, are certain feathers that spring from the lower part of the back, and are called the coverts of the tail (*uropygium*.)

THIGHS.

(*Femora*) are covered entirely with feathers in all land-birds, except the BUSTARDS and the OSTRICHES; the lower part of those of all waders, or cloven-footed water-fowl, are naked; that of all webbed-footed fowl the same, but in a less degree; in rapacious birds, are very muscular.

LEGS.

(*Crura*) Those of rapacious fowls very strong, furnished with large tendons, and fitted for tearing, and a firm gripe. The legs of some of this genus are covered with feathers down to the toes, such as the *Golden Eagle*, others to the very nails; but those of most other birds are covered with scales, or with a skin divided into segments, or continuous. In some of the PIES, and in all the PASSERINE tribe, the skin is thin and membranous; in those of web-footed water-fowl, strong.

THE legs of most birds are placed near the center of gravity: In land-birds, or in WADERS that want the back toe, exactly so; for they want that appendage to keep them erect. AUKS, GREBES, DIVERS, and PINGUINS, have their legs placed quite behind, so are necessitated to sit erect: Their pace is awkward and difficult, walking like men in fetters; hence *Linnaeus* styles their feet *pedes compedes*.

P R E F A C E.

vii

THE legs of all cloven-footed water-fowl are long, as they must wade in search of food: Of the palmated, short, except those of the FLAMINGO, the AVOSET, and the COURIER.

(*Pedes*) All land-birds that perch have a large back toe: Most of them have three toes forward, and one backward. WOODPECKERS, PARROTS, and other birds that climb much, have two forward, two backward; but PARROTS have the power of bringing one of their hind toes forward while they are feeding themselves. OWLS have also the power of turning one of their fore toes backward. All the toes of the SWIFT turn forwards, which is peculiar among land-birds: The TRIDACTYLOUS WOODPECKER is also anomalous, having only two toes forward, one backward: The OSTRICH is another, having but two toes.

FEET.

(*Digiti*) THE toes of all WADERS are divided; but, between the exterior and middle toe, is generally a small web, reaching as far as the first joint.

TOES.

THE SPOONBILL; and a SANDPIPER I received from *N. America*, have webs that reach half way up each toe, or are *semi-palmated*.

THE toes of birds that swim are either plain, as in the single instance of the common water HEN or GALLINULE; or pinnated, as in the COOTS and GREBES; or entirely webbed or palmated, as in all other swimmers.

ALL the PLOVER tribe, or CHARADRII, want the back toe. In the swimmers, the same want prevails among the ALBATROSES and AUKS. No water-fowl perch, except certain HERONS; the CORVORANT; and the SHAG.

(*Ungues*) Rapacious birds have very strong, hooked, and sharp

CLAWS.

P R E F A C E.

sharp claws, VULTURES excepted. Those of all land-birds that roost on trees have also hooked claws, to enable them to perch in safety while asleep.

THE GALLINACEOUS tribe have broad concave claws for scraping up the ground.

GREBES have flat nails like the human.

AMONG water-fowl only the SKUA, *Br. Zool. II. No. 243.* and the BLACK TOED GULL, *Br. Zool. II. No. 244.* have strong hooked or *aquiline* claws. All land-birds perch on trees, except the STRUTHIOUS and some of the GALLINACEOUS tribe. PARROTS climb; WOODPECKERS creep up the bodies and boughs of trees; SWALLOWS cling.

ALL water-fowl rest on the ground, except certain HERONS, and one species of IBIS, the SPOONBILL, one or two species of DUCKS, and of CORVORANTS.

F E A T H E R S.

FEATHERS are designed for two uses, as coverings from the inclemency of the weather, and instruments of motion through the air. They are placed in such a manner as to fall over one another, *tegulatim*, so as to permit the wet to run off, and to exclude the cold; and those on the body are placed in a quincuncial form, most apparent in the thick-skinned water-fowl, particularly in the DIVERS.

SHAFTS.

THE parts of a feather are, the SHAFTS, corneous, strong, light, rounded, and hollow at the lower part; at the upper, convex above, concave beneath, and chiefly composed of a pith.

ON

ON each side the SHAFTS, are the

VANES, broad on one side, narrow on the other: Each vane consists of a multitude of thin *laminae* *, stiff, and of the nature of a split quill. These *laminae* are closely braced together by the elegant contrivance of a multitude of small bristles; those on one side hooked, the other strait, which lock into each other, and keep the vanes smooth, compact, and strong.

THE vanes near the bottom of the shafts are soft, unconnected, and downy.

FEATHERS are of three kinds; such as compose the instruments of flight; as the PEN-FEATHERS; or those which form the wings and tail, and have a large shaft. The vanes of the exterior side bending downward, of the interior upwards, lying close on each other, so that, when spread, not a feather misses its impulse on the air †. The component parts of these feathers are described before.

THE feathers that cover the body, which may be properly called the PLUMAGE, have little shaft, and much vane, and never are exerted or relaxed, unless in anger, fright, or illness.

THE DOWN, *Plumæ*, which is dispersed over the whole body amidst the plumage, is short, soft, unconnected, consists of lanuginous vanes, and is intended for excluding that air or water which may penetrate or escape through the former. This is particularly apparent in aquatic birds, and remarkably so in the ANSERINE tribe. There are exceptions to the forms of feathers. The vanes of the subaxillary feathers of the PARADISE are unconnected, and the *laminae* distant, looking like herring-bone.

* Derham's phys. theol. 336. tab. f. 18, 19.

† Derham.

VANES.

PEN-FEATHERS.

PLUMAGE.

DOWN.

P R E F A C E.

Those of the tail of the OSTRICH, and head of a species of CURASSO, curled. Those of the CASSOWARY consist of two shafts, arising from a common stem at the bottom. As do, at the approach of winter (after moulting) those of the PTARMIGANS of *Arctic* countries. The feathers of the PINGUINS, particularly those of the wings, consisting chiefly of thin flat shafts, and more resemble scales than feathers; those of the tail, like split whale-bone.

F L I G H T.

THE flight of birds is various; for, had all the same, none could elude that of rapacious birds. Those which are much on wing, or flit from place to place, often owe their preservation to that cause: Those in the water to diving.

RAPACIOUS.

KITES, and many of the FALCON tribe, glide smoothly through the air, with scarce any apparent motion of the wings.

PIES.

MOST of the order of PIES fly quick, with a frequent repetition of the motion of the wings. The PARADISE floats on the air. WOODPECKERS fly awkwardly, and by jerks, and have a propensity to sink in their progress.

GALLINACEOUS.

THE GALLINACEOUS tribe, in general, fly very strong and swiftly; but their course is seldom long, by reason of the weight of their bodies.

COLUMBINE.

THE COLUMBINE race is of singular swiftness; witness the flight of the *Messenger Pigeon*.

PASSERINE.

THE PASSERINE fly with a quick repetition of strokes; their flight, except in migration, is seldom distant.

AMONG

P R E F A C E.

AMONG them, the SWALLOW tribe is remarkably agile, their evolutions sudden, and their continuance on wing long.

NATURE hath denied flight to the STRUTHIOUS; but still, in running, their short wings are of use, when erect, to collect the wind, and, like sails, to accelerate their motion.

STRUTHIOUS.

MANY of the greater CLOVEN-FOOTED Water-fowl, or WADERS, have a slow and flagging flight; but most of the lesser fly swiftly, and most of them with extended legs, to compensate the shortness of their tails. RAILS and GALLINULES, fly with their legs hanging down.

WADERS.

COOTS and GREBES, with difficulty are forced from the water; but when they rise, fly swiftly. GREBES, and also DIVERS, fly with their hind parts downwards, by reason of the forwardness of their wings.

PINNATED FEET.

WEB-FOOTED fowl are various in their flight; several have a sailing or flagging wing, such as GULLS. PINGUINS, and a single AUK, are denied the power of flight. WILD-GEESE, in their migrations, do not fly pell-mell, but in a regular figure, in order to cut the air with greater ease; for example, in long lines, in the figure of a > or some pointed form or letter, as the ancients report that the CRANES assumed, in their annual migrations, till their order was broken by storms.

WEB-FOOTED:

*Strymona sic gelidum, bruma pellente, relinquunt,
Potura te, Nile, GRAVES, primoque volatu
Effingunt varias, casu monstrante, figuras,
Mox ubi percussit tenfas Notus altior alas,
Confusos temerè immixta glomerantur in orbes,
Et turbata perit dispersis litora pennis.*

Lucan. lib. v. l. 711.

* T Δ Δ.

C 2

Of

OF the NUPTIALS, NIDIFICATION, and EGGS
of BIRDS.

MOST birds are monogamous, or pair, in spring fixing on a mate, and keeping constant, till the cares of incubation and educating the young brood is past. This is the case, as far as we know, with all the birds of the first, second, fourth, and fifth orders.

BIRDS that lose their mates early, associate with others; and Birds that lose their first eggs, will pair and lay again. The male as well as female of several join alternately in the trouble of incubation, and always in that of nutrition: When the young are hatched, both are busied in looking out for, and bringing food to the nestlings; and, at that period, the mates of the melodious tribes, who, before, were perched on some sprig, and by their warbling alleviated the care of the females confined to the nest, now join in the common duty.

OF the GALLINACEOUS tribe, the greatest part are polygamous, at least in a tame state; the PHEASANT, many of the GROUS, the PARTRIDGES, and BUSTARDS, are monogamous; of the GROUS, the COCK of the wood, and the BLACK GAME assemble the females during the season of love, by their cries:

Et venerem incertam rapiunt.

THE males of polygamous birds neglect their young, and, in some cases, would destroy them, if they met with them. The œconomy of the STRUTHIOUS order, in this respect, is obscure. It is probable that the three species in the genus OSTRICH are polygamous, like the common poultry, for they lay many eggs; the DODO is said to lay but one.

ALL.

P R E F A C E,

xiii

ALL Waders, or cloven-footed fowl, are monogamous, except the RUFFS; and all with pinnated feet, as far as I know, are also monogamous.

THE swimmers, or web-footed fowl, observe the same order, as far as can be remarked with any certainty; but many of the AUKS assemble in the rocks in such numbers, and each individual so contiguous, that it is not possible to determine their method in this article.

It may be remarked, that the affection of birds to their young, is very violent during the whole time of nutrition, or as long as they continue in a helpless state; but so soon as the brood can fly and shift for itself, the parents neglect, and even drive it from their haunts, the affection ceasing with the necessity of it: but, during that period,

The mothers nurse it, and the fires defend;
The young dismiss'd to wander earth, or air,
There stops the instinct, and there ends the care;
The link dissolves, each seeks a fresh embrace,
Another love succeeds, another race.

N I D I F I C A T I O N.

THE Nest of a bird is one of those daily miracles, that, from its familiarity, is passed over without regard. We stare with wonder at things that rarely happen, and neglect the daily operations of nature, that ought first to excite our admiration, and claim our attention.

EACH bird, after nuptials, prepares a place suited to its species, for the depositing its eggs, and sheltering its little brood: Different

rent genera, and different species, set about the task in manners suitable to their several natures; yet every individual of the same species collects the very same materials, puts them together in the same form, and chuses the same sort of situation for placing this temporary habitation. The young bird of the last year, which never saw the building of a nest, directed by a heaven-taught sagacity, pursues the same plan in the structure of it, and selects the same materials as its parent did before. Birds of the same species, of different and remote countries, do the same. The SWALLOWS of *England*, and of the remoter parts of *Germany*, observe the same order of architecture.

RAPACIOUS.

THE nests of the larger rapacious birds are rude, made of sticks and bents, but often lined with something soft. They generally build in high rocks, ruined towers, and in desolate places: enemies to the whole feathered creation, they seem conscious of attacks, and seek solitude. A few build upon the ground.

SHRIKES, the least of RAPACIOUS birds, build their nests in bushes, with moss, wool, &c.

PIES.

THE order of PIES is very irregular in the structure of their nests. PARROTS, and, in fact, all birds with two toes forward and two backward (as far as I know) lay their eggs in the hollows of trees. And most of this order creep along the bodies of trees, and lodge their eggs also within them.

CROWS build in trees: Among them, the nest of the MAGPIE, composed of rude materials, is made with much art, quite covered with thorns, and only a hole left for admittance.

THE nests of the ORIOLES are contrived with wonderful sagacity, and are hung at the end of some bough, or between the forks

P R E F A C E.

xy

of extreme branches. In *Europe*, only three birds have pensile nests; the common ORIOLE, the PARUS PENDULINUS, or HANG-NEST TITMOUSE, and one more *. But in the Torrid Zones, where the birds fear the search of the gliding serpent and inquisitive monkey, the instances are very frequent, a marvellous instinct implanted in them for the preservation of their young †.

ALL of the GALLINACEOUS and STRUTHIOUS orders lay their eggs on the ground. The OSTRICH is the only exception, among birds, of the want of natural affection: *Which leaveth her eggs in the earth, and warmeth them in the dust, and forgetteth that the foot may crush them, or the wild beast may break them.*

THE COLUMBINE race makes a most artless nest; a few sticks laid across suffice.

MOST of the PASSERINE order build their nests in shrubs or bushes, and some in holes of walls, or banks. Several in the Torrid Zone are pensile from the boughs of trees; that of the TAYLOR BIRD ‡, a wondrous instance. Some of this order, such as LARKS, and the GOATSUCKER, on the ground. Some SWALLOWS make a curious plaister nest beneath the roofs of houses; and an *Indian* species, one of a certain glutinous matter, which are collected as delicate ingredients for soups of *Chinese* epicures.

MOST of the Cloven-footed Water-fowl, or Waders, lay upon the ground. SPOONBILLS and the COMMON HERON build in trees, and make large nests with sticks, &c. STORKS build on churches, or the tops of houses.

COOTS make a great nest near the water-side.

* Vide Tour in *Scotland*, 2d Ed. page 101.

† *Indian Zool.*

‡ The same.

GREBES

GALLINACEOUS.
STRUTHIOUS.

COLUMBINE.

PASSERINE.

WADERS.

COOTS.

GREBES.

GREBES in the water, a floating nest, perhaps adhering to some neighboring reeds.

WEB-FOOTED.

WEB-FOOTED fowl breed either on the ground, as the AVOSET, TERNS, some of the GULLS, MERGANSERS, and DUCKS: the last pull the down from their breasts, to make a softer and warmer bed for their young. AUKS and GUILLEMOTS lay their eggs on the naked shelves of high rocks; PINGUINS in holes under ground: Among the PELICANS, that which gives name to the genus makes its nest in the desert, on the ground. SHAGS, sometimes on trees; CORVORANTS and GANNETS, on high rocks, with sticks, dried ALGÆ, and other coarse materials.

E G G S.

RAPACIOUS.

RAPACIOUS birds, in general, lay few eggs; EAGLES, and the larger kinds, fewer than the lesser. The eggs of FALCONS and OWLS are rounder than those of most other birds.

PIES.

THE order of PIES vary greatly in the number of their eggs.

PARROTS lay only two or three white eggs.

CROWS lay six eggs, greenish, mottled with dusky.

CUCKOOS, as far as I can learn, two.

WOODPECKERS, WRYNECK, and KINGFISHER, lay eggs of a most clear white and semi-transparent color. The WOODPECKERS lay six, the others more.

THE NUTHATCH lays often in the year, eight at a time, white, spotted with brown.

THE HOOPOE lays but two cinerous eggs.

THE CREEPER lays a great number of eggs.

THE HONEYSUCKER, the least and most defenceless of birds, lays but

but two: but Providence wisely prevents the extinction of the genus, by a swiftness of flight that eludes every pursuit.

THE GALLINACEOUS order, the most useful of any to mankind, GALLINACEOUS. lay the most eggs, from eight to twenty; *Benigna circa hoc natura, innocua et esculenta animalia fecunda generavit*, is a fine observation of Pliny. With exception to the BUSTARD, a bird that hangs between the GALLINACEOUS and the WADERS, which lays only two.

THE COLUMBINE order lays but two white eggs; but the domestic kind, breeding almost every month, supports the remark of the *Roman* naturalist.

ALL of the PASSERINE order lay from four to six eggs, except PASSERINE. the Titmice and the Wren, which lay fifteen or eighteen, and the Goatfucker, which lays only two.

THE STRUTHIOUS order, which consists but of two genera, disagree much in the number of eggs: the OSTRICH laying many, as far as fifty; the DODO but one.

STRUTHIOUS:

THE CLOVEN-FOOTED Water-fowl, or WADERS, lay, in general, WADERS. four eggs. The CRANE and the NORFOLK PLOVER seldom more than two. All those of the SNIPE and PLOVER genus are of a dirty white, or olive, spotted with black, and scarcely to be distinguished in the holes they lay in. The bird called the LAND RAIL (an ambiguous species) lays from fifteen to twenty. Of birds with pinnated feet, the COOT lays seven or eight eggs, and sometimes more. GREBES from four to eight, and those white.

THE WEB-FOOTED, or Swimmers, differ in the number of their WEB-FOOTED. eggs. Those which border on the order of Waders, lay few eggs; the AVOSET, two; the FLAMINGO, three; the ALBATROSS, the AUKS, and GUILLEMOTS, lay only one egg apiece: the eggs of

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the

the two last, are of a size strangely large in proportion to the bulk of the birds. They are commonly of a pale green color, spotted and striped so variously, that not two are alike; which gives every individual the means of distinguishing its own, on the naked rock, where such multitudes assemble.

DIVERS, only two.

TERNS and GULLS lay about four eggs, of a dirty olive, spotted with black.

DUCKS lay from eight to twenty eggs; the eggs of all the genus are of a pale green, or white, and unspotted.

PINGUINS lay two eggs*; white, and remarkably round.

OF the PELICAN *genus*, the GANNET lays but one egg; the SHAGS, or CORVORANTS, six or seven, all white; the last the most oblong of eggs.

A MINUTE account of the Eggs of birds, merits a treatise of itself, or should follow the description of each species. This is only meant to shew the great conformity nature observes in the shape and colors of the eggs of congenerous birds; and also, that she keeps the same uniformity of color in the eggs, as in the plumage of the birds they belong to.

Zinanni published, at Venice, in 1737, a treatise on eggs, illustrated with accurate figures of 106 eggs. Mr. Reyger of Dantzick published, in 1766, a posthumous work by Klein, with 21 plates, elegantly coloured: But much remains for future writers.

* Pennant's Voy. Falkland Isles, 32.

P R E F A C E.

xix

S Y S T E M.

CONSIDERING the many systems that have been offered to the public of late years *, I hope I shall not be accused of national partiality, in giving the preference to that composed by Mr. RAY in 1667, and afterwards published in 1678. It would be unfair to conceal the writer, from whom our great countryman took the original hint of forming that system, which has since proved the foundation of all that has been composed since that period.

IT was a *Frenchman*, BELON of *Mans*, who first attempted to range birds according to their natures, and performed great matters, considering the unenlightened age he lived in; for his book was published in 1555. His arrangement of rapacious birds is as judicious as that of the latest writers; for his second chapter treats of VULTURES, FALCONS, SHRIKES, and OWLS; in the two next, he passes over to the Web-footed Water-fowl, and to the Cloven-footed; in the fifth, he includes the GALLINACEOUS and STRUTHIOUS, but mixes with them the PLOVERS, BUNTINGS, and LARKS; in the sixth are the PIES, PIGEONS, and THRUSHES; and the seventh takes in the rest of the PASSERINE order.

NOTWITHSTANDING the great defects that every naturalist will at once see in the arrangement of the lesser birds of this writer, yet he will observe a rectitude of intention in

* By *M. Barrere* of *Perpignan* in 1745, *Mr. Klein* in 1750, *Mr. Mæhring* in 1753, *M. Brisson* in 1760, and by *Linnaeus* at different periods. Mr. RAY formed (in conjunction with Mr. WILLUGHBY) his tables of animals, in the winter 1667, for the use of Bishop WILKIN's *real character*.

general, and a fine notion of system, which was left to the following age to mature and bring to perfection. Accordingly, Mr. RAY, and his illustrious pupil the Hon. FRA. WILLUGHBY, assumed the plan; but, with great judgment, flung into their proper stations and proper genera, those which BELON had confusedly mixed together. They formed the great division of TERRESTRIAL and AQUATIC birds; they made every species occupy their proper place, consulting at once exterior form, and natural habit. They could not bear the affected intervention of aquatic birds in the midst of terrestrial birds. They placed the last by themselves, clear and distinct from those whose haunts and œconomy were so different.

VARIOUS attempts have been made to alter this system of our countrymen. It is a disagreeable and invidious task to expose the defects of other methodists, who may have, in many respects, great merit. I leave that to the peevish malignancy of the minute critics; therefore shall only acknowledge the sources from which I draw the materials of the present work, and give each their due share of merit.

Mr RAY's general plan is so judicious, that to me it seems scarcely possible to make any change in it for the better; yet, notwithstanding he was in a manner the founder of systematic Zoology, later discoveries have made a few improvements on his labors. My candid friend LINNÆUS did not take it amiss, that I, in part, neglected his example; for I permit the LAND-FOWL to follow one another, undivided by the WATER-FOWL, the *Grallæ* and *Anseres* of his system; but, in my generical arrangement, I most punctually attend to the order he has given
in

in his several divisions, except in those of his *Anseres*, and a few of his *Grallæ*. For, after the manner of *M. Brisson*, I make a distinct order of WATER-FOWL with pinnated feet, placing them between the WADERS or CLOVEN-FOOTED Water-fowl and the Web-footed. The OSTRICH, and Land-birds with wings useless for flight, I place as a distinct order. The TRUMPETER (*Pſo-
pbia Linnei*) and the BUSTARDS, I place at the end of the GALLINACEOUS tribe. All are Land-birds. The first *multiparous*, like the generality of the GALLINACEOUS tribe; the last granivorous, swift runners, avoiders of wet-places; and both have bills somewhat arched. It must be confessed, that both have legs naked above the knees; and the last, like the WADERS, lay but few eggs. They seem ambiguous birds that have affinity with each order; and it is hoped, that each naturalist may be indulged the toleration of placing them as suits his own opinion. Before I conclude, let me not pass over the assistance received in some of my definitions from Mr. SCOPOLI, an ornithologist of *Carniola*, who, in 1768, favored the world with a most elaborate account of the birds that had fallen within his observation. Thus, I flatter myself, I have given every naturalist, I am indebted to, his due.

— *Miserum est aliorum incumbere famæ.*

Ne collapsa ruant subductis tectis Columnis.

TABLE

TABLE of ARRANGEMENT, with the correspondent
ORDERS and GENERA in the SYSTEMA NATURÆ of
LINNÆUS.

DIVISION I. LAND-BIRDS. Div. II. WATER-FOWL.

Division I. {	Order I. Rapacious.	Accipitres LINNÆI.
	II. Pies.	Picæ.
	III. Gallinaceous.	Gallinæ.
	IV. Columbine.	Passeres.
	V. Passerine.	Passeres.
	VI. Struthious.	{ Gallinæ. Grallæ.

Division II. {	Order VII. Cloven-footed, or Waders.	{ Grallæ.
	VIII. Pinnated feet.	{ Anseres. Grallæ.
	IX. Web-footed.	{ Anseres. Grallæ.

DIV. I.

ORDER I. RAPACIOUS.

1 Vulture	Vultur	3 Owl	Strix
2 Falcon	Falco		

ORDER II.

ORDER II. P I E S.

4 Shrike	Lanius	17 Curucui	Trogon
5 Parrot	Pittacus	18 Barbet	Bucco
6 Toucan	Ramphastos	19 Cuckoo	Cuculus
7 Motmot	Ramphastos	20 Wryneck	Junco
8 Hornbill	Buceros	21 Woodpecker	Picus
9 Beefeater	Buphaga	22 Jacamar	Alcedo
10 Ani	Crotophaga	23 Kingfisher	Alcedo
11 Wattle		24 Nuthatch	Sitta
12 Crow	Corvus	25 Tody	Todus
13 Roller	Coracias	26 Bee-eater	Merops
14 Oriole	Oriolus	27 Hoopoe	Upupa
15 Grackle	Gracula	28 Creeper	Certhia
16 Paradise	Paradisæa	29 Honeyfucker	Trochilus

ORD. III. GALLINACEOUS.

30 Cock	Phasianus	35 Pheasant	Phasianus
31 Turkey	Meleagris	36 Grouse	Tetrao
32 Pintado	Numida	37 Partridge	Tetrao
33 Curassow	Crax	38 Trumpeter	Pfophia
34 Peacock	Pavo	39 Bustard	Otis

ORD. IV. COLUMBINE.

40 Pigeon	Columba
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ORD. V. PASSERINE.

41 Stare	Sturnus	49 Flycatcher	Muscicapa
42 Thrush	Turdus	50 Lark	Alauda
43 Chatterer	Ampelis	51 Wagtail	Motacilla
44 Coly	Loxia	52 Warblers	Motacilla
45 Grosbeak	Loxia	53 Manakin	Pipra
46 Bunting	Emberiza	54 Titmouse	Parus
47 Tanager	Tanagra	55 Swallow	Hirundo
48 Finch	Fringilla	56 Goatfucker	Caprimulgus

ORD. VI. STRUTHIOUS.

57 Dodo	Didus	58 Ostrich	Struthio
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DIV. II.

ORD. VII. CLOVEN-FOOTED, or WADERS.

59 Spoonbill	Platalea	68 Sandpiper	Tringa
60 Screamer	Palamedea	69 Plover	Charadrius
61 Jabiru	Mycteria	70 Oystercatcher	Hæmatopus
62 Boatbill	Cancroma	71 Jacana	Parra
63 Heron	Ardea	72 Pratincole	Hirundo
64 Umbre	Scopus Briff.	73 Rail	Rallus
65 Ibis	Tantalus	74 Sheath-Bill	
66 Curlew	Scolopax	75 Gallinule	Fulica
67 Snipe	Scolopax		

ORD. VIII.

ORD. VIII. PINNATED-FEET.

76 Phalarope	Tringa	78 Grebe	Colymbus
77 Coot	Fulica		

ORD. IX. WEB-FOOTED.

79 Avofet	Recurvirostra	88 Gull	Larus
80 Courier	<i>Curira Briff.</i>	89 Petrel	Procellaria
81 Flammant	Phœnicopterus	90 Merganser	Mergus
82 Albatros	Diomedea	91 Duck	Anas
83 Auk	Alca	92 Pinguin	Diomedea
84 Guillemot	Colymbus		Phæton
85 Diver	Colymbus	93 Pelican	Pelicanus
86 Skimmer	Rhyncops	94 Tropic	Phæton
87 Tern	Sterna	95 Darter	Plotus

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Explanation

Explanation of the Figure on the Title-Page.

- 1 Bastard wing, *Alula spuria*.
- 2 Lesser coverts of the wings, *Tectrices primæ*.
- 3 Greater coverts, *Tectrices secundæ*.
- 4 Quill feathers, *Primores*.
5. Secondary feathers, *Secundariæ*.
- 6 Tertials.
- 7 Coverts of the tail, *Uropygium*.
- 8 Vent feathers, *Criſsum*.
- 9 Tail feathers, *Rectrices*.

DIV. I. LAND-FOWL.

ORDER I.

RAPACIOUS.

ACCIPITRES *Linnaei*.

BILL, strait, hooked only at the end; edges cultrated, base covered with a thin skin.

NOSTRILS, differing in different species.

TONGUE, large and fleshy.

HEAD, cheeks, chin, and often neck, either naked or covered only with down or short hairs; the neck retractile.

CLAW, often hanging over the breast.

LEGS and FEET, covered with great scales; the first joint of the middle toe connected to that of the outmost, by a strong membrane.

CLAWS, large, little hooked, and very blunt.

INSIDES of the wings covered with down.

King of the Vultures. Bearded and crested Vultures. EDW. II.

CVI. CCXI. Bengal and Secretary Vultures. Latham's *Syn. of Birds*. Pl. 1, 2.

The *vul* of *Aristotle*, who mentions two species.

Vultur of *Linnaeus*, genus I. who enumerates VIII species. The *Vultur* and *Vautour* of *Briffon*, who describes XII species. *M. de Buffon* VIII. *Mr. Ray* VIII.

I. VULTURE.

EXAMPLE.

R A P A C I O U S.

No Vultures north of the *Baltic*, none in *Great Britain*. Various species in *Europe*, *Asia*, *Africa*, and *America*, as low as *Terra del Fuego*.

A sluggish, ungenerous race; prey oftener on dead animals, and even putrid carcases, than on living creatures. Their sense of smelling most exquisite. Collect in flocks from afar; directed to their prey by the sagacity of their nostrils. Fly slowly and heavily. Are most greedy, and voracious to a proverb. Are not timid, for they prey in the midst of cities, undaunted by mankind.

II. FALCON.

BILL, hooked; covered at the base with a naked membrane, or cere.

NOSTRILS, small, oval, placed in the cere.

TONGUE, large, fleshy, and often cleft at the end.

HEAD and NECK, covered with feathers.

LEGS and FEET, scaly; middle toe connected, from its first joint, to that of the outmost, by a strong membrane.

CLAWS, large, much hooked, and very sharp; that of the outmost toe the left.

The FEMALE larger and stronger than the male.

EXAMPLE.

Golden Eagle, *Br. Zool. fol. tab.* A. Falcon gentil. *Br. Zool. I. tab. XXI.* Chinese. E. N. Zealand, F. Latham's *Syn. of Birds.* Pl. 3, 4.

A carnivorous, rapacious race; not gregarious; quick-sighted: Generally fly high. Build in lofty places; except a few species which nestle on the ground.

Eagles and the larger kind of *Falcons* do not lay more than four eggs; some of the lesser, such as the *Kestrel*, lay six or seven; the

R A P A C I O U S.

the Eagles, properly so called, seldom more than two or three : Drink seldom ; the juices of their animal-food preventing thirst. Capable of enduring very long abstinence. Very long lived. Are clamorous ; their note puling and plaintive. Strike their prey with their feet. Their excrements white and fluid. Vomit up the indigested hair or feathers of their prey, in form of a round ball. Vary in the color of their plumage at different ages ; so the species are often unnecessarily multiplied by Ornithologists. Inhabit every climate.

Mr. Ray and M. Brisson separate the Eagles from the Falcons. The first has VIII species of Eagles, and XXV of Falcons or Hawks. The last, XV of Eagles, and XXXVII of Falcons. LINNÆUS, who, with much propriety, places both in one genus, enumerates thirty-two. Mr. Ray's division of the sluggish, and of the more active and generous, a very judicious one.

BILL, hooked ; base covered with bristles ; no cere.

NOSTRILS, oblong.

TONGUE, cleft at the end.

EYES, very large and protuberant, surrounded by a circle of feathers.

HEAD, very large and round ; full of feathers.

EARS, large and open.

OUTMOST TOE, versatile, or capable of being turned back, so as to act with the back toe.

CLAWS, hooked and sharp.

Eagle Owl, *Br. Zool. I. tab. XXIX.* Owls. Latham's *Syn. of Birds.* Pl. 5.

A nocturnal Bird, preys in the evening and by night ; often flies along

III. OWL.

Ex.

R A P A C I O U S.

along the ground in search of prey; carnivorous; quick of hearing; winks in the day; makes a hooting noise in the night; sometimes a squeaking. Snores loud. Builds in rocks, in hollow trees, or ruined edifices. Lays not more than five eggs. Inhabits every climate.

Mr. Ray divides this genus into two; those with and those without Horns; enumerates III species with, and VIII without. *M. Briffon* styles the first *Asto*, and has IX; the other *Strix*, and has XI species. *Buffon* XV.

ORDER

ORDER II.

P I E S.

P I C Æ *Linnaei.*

BILL, strait, hooked only at the end; near the end of the upper mandible a sharp process. No cere.

NOSTRILS, round, covered with stiff bristles.

TONGUE, jagged at the end.

TOES divided to the origin.

TAIL cuneiform.

IV. SHIRKE.

Butcher Birds, *Br. Zool. fol. tab. C. I. Br. Zool. I. tab. XXXIII.*

Ex.

Carnivorous or insectivorous; kill small birds by strangling, or by crushing their skull with their bills, then pull them to pieces, and stick the fragments on thorns; do the same by insects. Bold, noisy, and querulous. Build in low bushes. Lay six eggs.

The genus that connects the rapacious Birds and Pies; agreeing with the first in the strength and crookedness of the bill, and its predatory life; with the last, in the form of the toes, the tongue, and tail. Nearly related to the *Maggie*: The French style it *Pie-Grièche*.

Different species found in the new and old world, and in all climates, except within the *Arctic* circle.

The Butcher Birds or Skrikes of Mr. Ray, who describes IV species. The *Lanius* of LINNÆUS, who has XXVI species.

P I E S.

The *Lanius* and *Pie-Griescbe* of *Briffon*, who reckons up XXVI. *Buffon* XIV.

I reject the compound name of *Butcher-Bird*, and retain the old *English* name of *Sbrike*, from the noise.

V. PARROT.

BILL, hooked from the base : Upper mandible moveable.

NOSTRILS, round, placed in the base of the bill.

TONGUE, broad, blunt at the end.

HEAD, large ; crown flat.

LEGS, short. TOES, two backward, two forward.

Ex.

Maccaw EDW. CLVIII. Parrot, CLXVI.

Gregarious, clamorous ; the wild note loud and harsh. Very docile, imitative of sounds ; imitates the human speech. Climbs by help of the bill and feet. Makes use of the feet as hands to convey meat to the mouth, turning the legs outward. Frugivorous : Can crack the hardest kernels. Breeds in hollow trees. Makes no nest : Lays two or three white eggs : Inhabits within the Tropics, *Africa*, *Asia*, and *America* ; a few are found as far North as *Carolina* : and South as the Straits of *Magellan*.

Psittacus of LINNÆUS, and *Briffon*, IV. 182. The first has XLVII. the last XC species.

VI. TOUCAN.

BILL, most disproportionably large ; convex and carinated at top, and bending at the end ; hollow ; very light, serrated at the edges.

NOSTRILS, small and round, placed close to the head, and hid in the feathers.

TONGUE, long and narrow, feathered at the edges.

TOES, two forward, and two backward.

Toucans.

P I E S.

Toucans Edw. LXIV. CCXXXIX.

Ex.

A genus confined to *America*, within the Tropics. Feeds on fruits: Breeds in hollow trees. Is very noisy; easily made tame.

Mr Ray, misled by the name of *Brasilian Pie*, places it with the Magpie. LINNÆUS calls it *Rampastos*, a *ῥαμπος*, a broad sword, from the form of its bill, and has VIII species. Briffon, IV. 407. retains the *Brasilian* name *Toucan*, and has XII species.

BILL, strong, slightly incurvated; serrated at the edges.

VII. MOTMOT.

NOSTRILS, covered with feathers.

TAIL, cuneiform: The two middle feathers much longer than the others: Near the ends quite destitute of webs. The webs at the ends subovated.

TOES, three before, one behind; the fore toes closely united almost their whole length.

Brasilian saw-billed Roller. Edw. CCCXXVI.

Ex.

Inhabits *S. America*.

Rampastos Momota of LINNÆUS.

Momotus of Briffon, IV. 464. who has II species. I retain the *Mexican* name in *Fernandez hist. av. Nov. Hisp. 52.*

Great bending BILL, oft-times a large protuberance resembling another bill on the upper mandible. Edges jagged.

VIII. HORN-BILL. X

NOSTRILS, small, round, placed behind the base of the bill.

TONGUE.

F

LEOS

P I E S.

LEGS, scaly: TOES, three forward, one backward: The middle connected to the outmost, as far as the third joint; to the inmost, as far as the first.

Ex.

Several Bills EDW. CCLXXXI. *Wil. orn. tab. XVII.* A species with a horn pointing forward, and wattles under the chin, engraved in *Moore's travels* into the inland parts of *Africa*, p. 108. Found in the *Indian* islands.

Buceros of LINNÆUS, a βους an ox, and κερας a horn, from the form of the bill. *Hydrocorax* of *Briffon*, II. 565, or Water Raven, from its being supposed to inhabit watry places.

LINNÆUS has IV species. *Briffon* V.

IX. BEEF-EATER.

BILL, strong, thick, strait, nearly square. Upper mandible a little protuberant; on the lower, a large angle.

TONGUE.

TOES, three before, one behind. The middle connected to the outmost as far as the first joint.

Ex.

Le pique Bœuf. *Briffon* II. *tab. XLII.*

Inhabits *Senegal*. Only one known species.

Buphaga of LINNÆUS and *Briffon* II. 437. a βους an ox, and φαγνν to eat, because it picks holes in the backs of cattle, to get at the *Larvæ* of insects deposited there.

X. ANI.

BILL, compressed, greatly arched, half oval, thin, cultrated at top.

NOSTRILS, round.

TOES, two backward, two forward.

Ten feathers in the TAIL.

Razor-

Razor-bill'd Blackbird. *Catesby Carol. app. III. the feet faultily expressed. Le Bout de Petun, Brisson IV. tab. XVIII.*

Ex.

Inhabits *South America*: Within the Tropics.

Crotophaga of LINNÆUS and *Brisson IV. 177. from Kérolé, because this genus feeds on ticks. Only II species. Mr. Ray places it at the end of the Parrots. I retain the Brazilian name Ani.*

BILL, strong, thick, rounded at top; convex.

XI. WATTLE.

NOSTRILS, covered partly above with a flap; and near their ends with a tuft of feathers: On each side of the base of the bill, a red, thin, fleshy membrane, or Wattle, of a round form.

TONGUE, truncated, split, ciliated.

TAIL, long and cuneiform.

LEGS and FEET, strong: the first carinated behind.

TOES, large; three forward, ~~two~~ backward. CLAWS, great and crooked, especially that of the hind toe.

A non-descript genus, as yet discovered only in *New Zeland*.

BILL, strong, upper mandible a little convex. Edges cultrated.

XII. CROW.

NOSTRILS, covered with bristles reflected over them.

TONGUE, divided at the end.

TOES, three forward, one backward, the middle joined to the outmost as far as the first joint.

Royston Crow, Br. Zool. fol. tab. D. I.

Ex.

Different species found in every climate: clamorous: promiscuous feeders: build in trees: lay about six eggs.

Corvus of LINNÆUS, who mentions XIX species.

Brisson divides this genus into *Coracias*, or the Chough; *Corvus*,

or Crow; *Pica*, or Magpye; *Garrulus*, or Jay; *Nucifraga*, or Nutbreaker; including XXIII species.

- XIII. ROLLER. BILL, strait, bending a little towards the end, edges cultrated.
 NOSTRILS, narrow and naked.
 TOES, three forward; divided to their origin; one backward.

Ex.

Blue Jay *Edw.* CCCXXVI. Roller *Br. Zool.* II. *App. Europe, Asia, Africa*, and the hot parts of *America*. A genus nearly related to the Crow. Thence LINNÆUS calls it *Coracias*: a word of *Aristotle's*, applied only to what we call the Cornish Chough. *Kopaxias Φοινικορύνχος*, *Hist. an. lib.* IX. c. 24. *Coracias* of LINNÆUS, who has VI species. *Galgulus* of *Briffon*, who has X species.

- XIV. ORIOLE. BILL, strait, conic, very sharp pointed, edges cultrated, inclining inwards. Mandibles of equal length.
 NOSTRILS, small, placed at the base of the bill, and partly covered.
 TONGUE, divided at the end.
 TOES, three forward, one backward: the middle joined near the base to the outmost one behind.

Ex.

Redwing Starling *Catesby Carol.* 1. XIII.

In general, inhabitants of *America*.

A numerous race, gregarious, noisy, frugivorous, granivorous, voracious: often have penfile nests.

LINNÆUS enumerates, under the title of *Oriolus*, XX species, but some belong to the *Turdine* or Thrush kind. *Briffon* II. 85. calls this genus *Icterus*, and has XXX species. The genuine *Oriolus* is a Thrush.

BILL,

BILL, convex, thick, compressed a little on the sides, cultrated. **XV. GRAKLE.**
 NOSTRILS, small, near the base of the bill; often near the edge.
 TONGUE, entire; rather sharp at the end.
 TOES, three forward, one backward; the middle connected at the
 base to the outmost.
 CLAWS, hooked and sharp.

Mino, EDW. XVII. Chinese Starling. EDW. XIX. **Ex.**
 Inhabits *Asia* and *America*.

Gracula of LINNÆUS, VIII species. *Icterus*, *Pica*, and *Turdus* of
Briffon.

NONE of LINNÆUS's species can be the *Graculus* of *Pliny*, or our
 Chough. For all his are *Asiatic*, *African*, or *American*.

BILL, slightly bending. The base covered with velvet-like feathers. **XVI. PARADISE.**
 NOSTRILS, small, and concealed by the feathers.
 TAIL, consisting of ten feathers; two very long naked shafts,
 springing from above the rump.
 LEGS and FEET, very large and strong; three toes forward, one
 backward: the middle connected as far as the first joint of the
 exterior.
 CLAWS, large, hooked, and sharp.

Birds of Paradise, EDW. CX. CXI. **Ex.**
 Floats on the air, and often flies swiftly backwards and forwards,
 like the Swallow; often lights, and perches on trees; feeding
 on fruits, and even small birds.

Inhabits *New Guinea* and the *Molucca Isles*. *Paradisæa* of LIN-
 NÆUS, III species. *Manucodiata* of *Briffon* II. 130. only II
 species. More since discovered.

BILL,

XVII. CURUCUI BILL, short, thick, and convex.

NOSTRILS, covered with stiff bristles.

TONGUE.

TOES, two backward, two forward.

LEGS, feathered down to the toes.

TAIL, consists of twelve feathers.

Ex.

Yellow-bellied green Cuckow, EDW. CCCXXXI.

Fasciated Couroucou. *Ind. Zool. tab. V.*

Probably have the manners of the Woodpeckers.

Inhabits *South America*.

Trogon of LINNÆUS, III species. The same of *Briffon*, IV. 164. has VI species. The reason for the name *Trogon* seems to be, because *Pliny* has such a name after the *Picus*. As the genus is *Brazilian*, I retain the name of the country.

XVIII. BARBET. BILL, strong, strait, bending a little towards the point. Base covered with strong bristles, pointing downwards.

NOSTRILS, hid in the feathers.

TONGUE.

TOES, two backward, two forward, divided to their origin.

TAIL, consisting of ten weak feathers.

Ex.

Yellow Woodpecker, with red spots, EDWARDS, CCCXXXIII.

Inhabits *South America* and the *Indian Islands*.

Bucco of LINNÆUS and *Briffon* IV. 91. The first has L species.

The last V. *Briffon* styles it *Bucco* from the fulness of the cheeks; *Barbu* from its bristles, a sort of beard, from which I form the generical name *Barbet*.

BILL, weak, a little bending.
 NOSTRILS, bounded by a small rim.
 TONGUE, short, pointed.
 TOES, two forward, two backward.
 TAIL, cuneated; consists of ten soft feathers.

XIX. CUCKOO.

Cuckoo, *Br. Zool. fol. tab. G. G. I. Br. Zool. I. tab. XXXVI.*

Ex.

Inhabits every climate.

Cuculus of LINNÆUS and *Briffon*, IV. 104. The one has XXII species; the other XXVIII.

The *κορυμβος*, and *Coccyx* of the *Ancients*, a word formed from the sound of the *European* species. *Cuculus* is only used in an opprobrious sense.

BILL, weak, slender, pointed.
 NOSTRILS, large and oval, near the ridge of the bill.
 TONGUE, very long, cylindric, very slender, and terminated by a hard point, missile.
 TOES, two forward, two backward.
 TAIL, consisting of ten even and soft feathers.

XX. WRYNECK.

Wryneck, *Br. Zool. fol. tab. G. Br. Zool. I. tab. XXXVI.*

Ex.

Its manners, *vide Br. Zool.*

Inhabits *Europe* and *Bengal*. Only one species known. *Ιωγξ* of *Aristotle*, *Jynx* of *Pliny*, LINNÆUS, and *Briffon*, vol. iv. 3.

BILL, strait, strong, angular; cuneated at the end.
 NOSTRILS, covered with bristles reflected down.
 TONGUE, very long, slender, cylindric, bony, hard, and jagged at the end, missile.

XXI. WOOD-PECKER.

TOES,

TOES, two forward, two backward.
TAIL, consisting of ten hard, stiff, sharp-pointed feathers.

Ex.

Woodpeckers, *Br. Zool. fol. tab. E. Br. Zool. I. tab. XXXVII.*

The manners, *vide Br. Zool.*

Inhabits all the Continents.

Δρυοκολλητής or Oak-rapper of *Aristotle*, *Picus Martius* of *Pliny*, *Picus* of *LINNÆUS* and *Briffon*, IV. 8. *LINNÆUS* has XXI. *Briffon* XXXI species.

XXII. JACAMAR BILL, long, strait, sharp pointed, quadrangular.

NOSTRILS.

TONGUE, short.

LEGS, feathered before to the Toes.

TOES, disposed two forward, two backward. The two foremost closely connected together.

Ex.

Jacamiciri Edw. CCCXXXIV.

Inhabits *S. America*.

Alcedo Galbula of *LINNÆUS*. *Galbula* of *Briffon*, IV. 86. who has II species. I retain his name from the *Brazilian Jacamiciri*.

XXIII. KINGS-
FISHER.

BILL, long, strong, strait, sharp pointed.

NOSTRILS, small, and hid in the feathers.

TONGUE, short, broad, sharp pointed.

LEGS, short; three toes forward, one backward: three lower joints of the middle toe joined closely to those of the outmost.

Ex.

Kingsfisher, *Br. Zool. fol. tab. I. Br. Zool. I. tab. XXXVIII.*

Found in all the quarters of the world. Flies swiftly, strong, and direct. All the species do not haunt rivers, nor prey on fish.

fish. Ἀλκυων of Aristotle, the Halcyon of Pliny, *Alcedo* of LINNÆUS, *Ispida* of Briffon, IV 471. The first gives us XV species. Briffon XXVI.

BILL, strait; on the lower mandible a small angle.

NOSTRILS, small, covered with feathers reflected over them.

TONGUE, short, horny at the end, and jagged.

TOES, three forward, one backward. The middle toe joined closely at the base to both the outmost. Back toe as large as the middle toe.

Its manners, *vide* Br. Zool.

Nuthatch Br. Zool. fol. tab. H. Br. Zool. I. tab. XXXVIII.

Inhabits Europe, Asia, America.

Sitta of LINNÆUS and Briffon. III. 588. he describes V species, LINNÆUS II. Aristotle's *Sitta* not easily determinable.

BILL, thin, depressed, broad, base beset with bristles.

NOSTRILS, small.

TONGUE.

TOES, three forward, one backward, connected like those of the Kingfisher.

Green-sparrow, EDW. CXXI.

Inhabits the hot parts of America.

Todus of LINNÆUS and Briffon IV. 528. who enumerate II species.

The name first given it by Dr. Brown, I suppose, from *Todi*, small birds.

XXIV. NUT;
HATCH.

Ex.

XXV. TODY.

Ex.

G

BILL,

XXVI. BEE-
EATER.

BILL, quadrangular, a little incurvated, sharp pointed.

NOSTRILS, small, placed near the base.

TONGUE, slender.

TOES, three forward, one backward: The three lower joints of the middle toe closely joined to those of the outmost.

Ex.

Indian Bee-eater, EDW. CLXXXIII.

Feeds on Bees, which it catches in its flight; from which the *English* name.Inhabits *Southern Europe, Asia, Africa, and America.**Merops* of LINNÆUS, *Apiaster* of Brisson, IV. 532. The first has VII species, the last XIII.

XXVII. HOOPOE

BILL, long, slender, and bending.

NOSTRILS, small, placed near the base.

TONGUE, short, sagittal.

TOES, three forward, one backward; middle toe closely united at the base to the outmost.

Ex.

Hoopoe, *Br. Zool. fol. tab. L. Br. Zool. I. tab. XXXIX.*Inhabits *Europe and Asia.**Upupa* of LINNÆUS. *Upupa* and *Promerops* of Brisson, II 456. 460.

LINNÆUS has III species. Brisson I of the first, V of the last.

XXVIII.
CREEPER.

BILL, very slender, weak, incurvated.

NOSTRILS, small.

TONGUE, not so long as the bill; hard, and sharp at the point.

TOES, three forward, one backward; large back toe, and long hooked claws.

Creoper, *Br. Zool. fol. tab. K. Br. Zool. I. XXXIX.* According to its name, creeps up and down the trunks and branches of trees, feeding on insects, their eggs and *larvæ*.

Ex.

Inhabits *Europe, Asia, Africa, and America.*

Certhia of LINNÆUS and *Briffon*, III. 602. The first has XXV species; the last XXXII.

BILL, slender and weak; in some strait, in others incurvated.

XXIX. HONEY-SUCKER.

NOSTRILS, minute.

TONGUE, very long, formed of two conjoined cylindric tubes; missile.

TOES, three forward, one backward.

TAIL, consists of ten feathers.

Long tailed red humming bird, *Edw. XXXII.* which is the sort with crooked bills, called by *Briffon*, *Polytmus*.

Ex.

White bellied humming bird, *Edw. XXXV.* or the kind with strait bills: The *Mellisuga* of *Briffon*.

Feeds on the sweet juices of flowers, which it sucks out with its tubular tongue, hanging in the air on its wings.

Inhabits *America*, especially the warm parts: A numerous genus.

Trochilus of LINNÆUS; *Polytmus* and *Mellisuga* of *Briffon*. LINNÆUS has XXII species; *Briffon* XVI of the *Polytmus*, XX of the *Mellisuga*. The old *English* name was *Humming-bird*; which I now change to HONEY-SUCKER.

O R D E R III.

G A L L I N A C E O U S.

Heavy bodies, short wings, very convex; strong, arched, short bills: The upper mandible shutting over the edges of the lower. The flesh delicate, and of excellent nutriment; strong legs; toes joined at the base, as far as the first joint, by a strong membrane. Claws broad, formed for scratching up the ground. More than twelve feathers in the tail.

Granivorous, feminivorous, insectivorous, swift runners, of short flight; often polygamous, very prolific, lay their eggs on the bare ground. Sonorous, querulous, and pugnacious.

Or, with bills slightly convex; granivorous, feminivorous, insectivorous; long legs, naked above the knees: The genus that connects the land and the water-fowl. Agreeing with the cloven-footed water-fowl in the length and nakedness of the legs, and the fewness of its eggs: Disagreeing in place, food, and form of bill, and number of feathers in the tail.

GALLINACEOUS.

19

BILL, very convex, short, and strong.
NOSTRILS, bodied in a fleshy substance.
TONGUE, cartilaginous, sharp, entire.
HEAD, adorned with a *Comb*, or elevated serrated flesh.
SPURS on the legs.
TAIL, consisting of fourteen feathers; that of the male, sickle-shaped.

XXX. COCK.

To be found in every farm-yard.
 Its native country *India* and its isles.
 Domesticated every where.
Phasianus of LINNÆUS, who classes it with the Pheasant, and has VI species. *Gallus* of Briffon, I. 165. who enumerates V, but they are only varieties.

Ex.

BILL, convex, short and strong.
NOSTRILS, open, pointed at one end, lodged in a membrane.
TONGUE, sloped on both sides towards the end, and pointed.
HEAD and **NECK**, covered with a naked tuberosc flesh, with a long fleshy appendage hanging from the base of the upper mandible.
TAIL, broad, consists of eighteen feathers, extensible.

XXXI. TURKEY.

Unknown to none.
 Native of *North America* only: Domesticated in most countries.
Meleagris of LINNÆUS, and *Gallo-pavo* of Briffon, I. 158. LINNÆUS has III, Briffon II species.

Ex.

BILL,

GALLINACEOUS

- XXXII. PIN-TADO. BILL, convex, strong, and short: at the base a carunculated cere, in which the NOSTRILS are lodged. HEAD and NECK, naked, slightly beset with bristles. A HORN, reflected and large, on the head. LONG POINTED WATTLES, hanging from the cheeks. TAIL, short, pointing downwards.
- Ex. Too common to need a reference. Its native place *Africa*. *Numida* of LINNÆUS, who has I. species. *Meleagris* of Brisson, I. 176. who has likewise I. He calls it in French, *La Peintade*, a name I retain.
- XXXIII. CURASSO. BILL, convex, strong, and thick, the base covered with a cere, often mounted by a large nob. NOSTRILS, small, lodged in the cere. HEAD, sometimes adorned with a crest of feathers, curling forwards. TAIL, large, strait.
- Ex. Curasso, and Cufhew-bird, EDW. CCXCV. Inhabits *South America*. *Crax* of LINNÆUS and Brisson, I. 296. But the last classes them with the Pheasant, and has VI species, LINNÆUS III.
- XXXIV. PEACOCK. BILL, convex, strong, and short. NOSTRILS, large. HEAD, small, crested. SPURS on the legs. TAIL,

TAIL, very long, broad, expansible, consisting of a double range of feathers, adorned with rich ocellated spots.

Common Peacock, frequent in most parts. The Peacock Pheasant, EDW. LXVII.

The native place *India, Japan, and China.*

Pavo of LINNÆUS, and *Phasianus* of Brisson, I. 281. who reckons IV species of Peacocks, LINNÆUS III.

BILL, convex, short, and strong.

NOSTRILS, small.

TAIL, very long, cuneiform, bending downwards.

Painted Pheasant, EDW. LXVIII.

Inhabits *Asia* and *South America.*

Phasianus of LINNÆUS and *Brisson* I. 262. who has (including Peacocks and Curassoes) XVI species, LINNÆUS VI.

BILL, convex, strong, and short.

A naked scarlet skin above each EYE.

NOSTRILS, small, and hid in the feathers.

TONGUE, pointed at the end.

LEGS, strong, feathered to the toes; and sometimes to the nails.

The toes of those with naked feet pectinated on each side.

Grouse, *Br. Zool. fol. tab. M. 3. Br. Zool. I. tab. XLIII.*

Inhabits the mountains or woods of *Europe*, northern and eastern *Asia*, and *North America.*

Ex.

XXXV. PHEASANT.

XXXVI. GROUSE.

Ex.

TETRAO

GALLINACEOUS.

TETRAO *pedibus hirsutis* of LINNÆUS, who has IX species. *Lagopus* of Brisson, I. 181. who has XII.

XXXVII. PAR-
TRIDGE.

BILL, convex, strong, and short.

No naked skin above the EYES.

NOSTRILS, covered above with a callous prominent rim.

LEGS, naked, tetradactylous. *Exception*, two species of Quails.

TAIL, short.

Ex.

Partridge, *Br. Zool. fol. tab. M. V.*

Inhabits the cultivated parts of the world.

TETRAO *pedibus nudis* of LINNÆUS, who has XI species. *Perdix* of Brisson, who has XXI.

XXXVIII.
TRUMPETER.

BILL, short, upper mandible a little convex.

NOSTRILS, oblong, sunk, and pervious.

TONGUE, cartilaginous, flat, torn, or fringed at the end.

LEGS, naked a little above the knees.

TOES, three before; one small behind, with a round protuberance beneath the hind toe, which is at a small distance from the ground.

Ex.

Grus Psophia, *Pallas spicil. fasc. IV. tab. I.*

Inhabits *South America*; lives in the woods; feeds on the fruit that fall down. Does not perch. Makes a strong noise with its mouth, which it answers by a different noise from its belly, as if it came from the anus. Lays many eggs.

Psophia of LINNÆUS, from *ψοφω strepitum edo*. *Perdix* of Brisson, I. 227. only I. species. A beautiful specimen in the LEVERIAN Museum.

BILL

GALLINACEOUS.

23

BILL, a little convex.

NOSTRILS, open, oblong.

TONGUE, sloping on each side near the end, and pointed.

LEGS, long, and naked above the knees.

TOES, only three; no back toe.

XXXIX. BUS-
TARD.

BUSTARD, *Br. Zool. fol. tab. IV. Br. Zool. I. tab. XLIV.*

Ex.

Inhabits *Europe, Asia, Africa, and New Holland.*

Otis of LINNÆUS and *Briffon*, V. 18. One has IV. the other III species. *De Buffon*. *Pliny* tells us, that *Otis* was the Greek name, that the Spanish was *Sarda*.

H

ORDER

ORDER IV.

C O L U M B I N E.

BILL, weak, slender, strait at the base, with a soft protuberant substance, in which the nostrils are lodged. Tongue, entire: Legs, short, and red: Toes, divided to the origin. Swift and distant flight, walking pace. Plaintive note, or *cooing*, peculiar to the order. The male inflates or swells up its breast in courtship. Female, lays but two eggs at a time. Male and female sit alternately; and feed their young, ejecting the meat out of their stomachs into the mouths of the nestlings. Granivorous, feminivorous. The nest simple, in trees, or holes of rocks, or walls.

XL. PIGEON. There is only one genus of this order; it is therefore needless to repeat the characters.

Ex.

A well known bird.

Inhabits all the Continents.

Columba of LINNÆUS and *Briffon*, I. 67. LINNÆUS has XL species, *Briffon* XLIV.

ORDER

ORDER V.

P A S S E R I N E.

BODIES, from the size of a Thrush, to that of the golden-crested Wren. The enliveners of the woods and fields; sprightly, and much in motion; their nests very artificial; monogamous, bac-civorous, granivorous, feminivorous, insectivorous; their usual pace, hopping; of a few, running. Short flyers, except on their migrations only. All have three Toes before, one behind.

BILL, strait, depressed.

NOSTRILS, guarded above by a prominent rim.

TONGUE, hard and cloven.

TOES, the middle joined to the outmost as far as the first joint.

Stare, *Br. Zool. fol tab. P. II. Br. Zool. I. tab. XLVI.*

Sturnus of LINNÆUS and *Briffon* II. The first has V species, the last four.

XLII. STARE.

Ex.

BILL, strait, obtusely carinated at top, bending a little at the point, and slightly notched near the end of the upper mandible.

NOSTRILS, oval and naked.

TONGUE, slightly jagged at the end.

XLII. THRUSH.

H 2

Toes,

TOES, the middle joined to the outmost as far as the first joint;
back toe very large.

Ex.

Fieldfare, *Br. Zool. fol. P. II.*

Blackbirds, *Br. Zool. I. tab. XLVII.*

Turdus of LINNÆUS and *Briffon II.*

LINNÆUS has XXVIII species, *Briffon LXIV.*

XLIII. CHAT-
TERER.

BILL, strait, a little convex above, and bending towards the point;
near the end of the upper mandible, a small notch on each
side.

NOSTRILS, hid in bristles.

MIDDLE TOE, closely connected at the base to the outmost.

Ex.

The Pompadour, *Edw. CCCXLI.*

Ampelis of LINNÆUS (from ἀμπελός, a vine); because the *Bohe-
mian Chatterer*, the bird he places at the head of this genus,
feeds sometimes on grapes. He reckons VII species. The
Cotinga of *Briffon II. 339.* an *American* name. He has X spe-
cies. Inhabits *Europe* and *America*.

XLIV. COLY.

BILL, convex above, strait beneath; very short and thick.

NOSTRILS, small, placed at the base, and hid by the feathers.

TONGUE, not the length of the bill, lacinated at the end.

TOES, divided to their origin.

Ex.

Le Coliou, *Briffon III. part I. tab. XVI. fig. 2.*

Inhabits *Africa*.

LINNÆUS includes this among his *Loxia*. *Briffon III. part I. 304.*
calls it *Colius*.

BILL,

BILL, strong, and convex above and below, very thick at the base.
NOSTRILS, small and round.
TONGUE, as if cut off at the end.

XLV. GROS-
BEAK.

Grosbeak, *Br. Zool. fol. tab. U.*

Ex.

Pine Grosbeak, *Br. Zool. I. tab. XLIX.*

Inhabits every Continent.

Loxia of LINNÆUS including the *Coccothraustes* of Briffon, III. part I. 219. the *Colius* 304. the *Pyrrhula* 308. and *Loxia* or Cross-bill 329. LINNÆUS has XLVII species; *Briffon* in all XXXI. *Loxia* is the proper name of the Cross-bill, from λοξος, oblique.

BILL, strong, and conic, the sides of each mandible bending inwards; in the roof of the upper mandible, a hard knob, of use to break and comminute hard feeds.

XLVI.
BUNTING.

Bunting, *Br. Zool. fol. tab. W.*

Ex.

Inhabits Europe, Asia, and America.

Emberiza of LINNÆUS and *Briffon* III. part I. 257. The first has XXIV species, the last XV. The name is derived from *Embritz*, or *Emmeritz*, its German name. *Vide Gefner, av. 653.*

BILL, conoid, a little inclining towards the point, upper mandible slightly ridged, and notched near the end.

XLVII. TANA-
GER.

Red-breasted Blackbird, EDW. CCLXVII. and greater Bulfinch, LXXXII.

Ex.

Inhabits North and South America; most numerous in the latter.

Tanagra

P A S S E R I N A E.

Tanagra of LINNÆUS, and *Tangara* of Brisson III. part I. 3.

LINNÆUS reckons XXIV species, *Brisson* XXX.

The name *Tangara* is *Brasilian*.

XLVIII. FINCH. BILL, perfectly conic, slender towards the end, and very sharp pointed.

Goldfinch, *Br. Zool. fol. tab. V.*

Sparrows, *Br. Zool. I. tab. XLI.*

Inhabits all the quarters of the world.

Fringilla of LINNÆUS, who enumerates XXXIX species. *Passer* of *Brisson* III. part I. 71. who has LXVII species.

XLIX. FLY-CATCHER. BILL, flattened at the base, almost triangular, notched at the end of the upper mandible, and beset with bristles.

TOES, divided as far as their origin.

Ex. Flycatcher, *Br. Zool. fol. tab. P. II.*

Inhabits all the quarters of the world.

Muscicapa of LINNÆUS and *Brisson*, II. The first has XXI species; the last XXXVIII.

L. LARK. BILL, strait, slender, bending a little towards the end, sharp pointed.

NOSTRILS, covered with feathers and bristles.

TONGUE, cloven at the end.

P A S S E R I N E.

39

Toes, divided to the origin; claw of the back toe very long, and either strait, or very little bent.

Larks, *Br. Zool. fol. tab. S. Br. Zool. I. tab. LV.*

Ex.

Inhabits *Europe, Asia, Africa, and America.*

Alauda of LINNÆUS and *Briffon* III. part II. 335. LINNÆUS has XI species, *Briffon* XII.

BILL, weak and slender.

TONGUE, lacerated at the end.

LEGS, slender.

Frequent the sides of brooks; their tails much in motion; their pace running; seldom perch; their nest on the ground.

Wagtails, *Br. Zool. I. tab. LV.*

LI. WAGTAIL.

After the example of *Scopoli*, I separate these, the genuine *Motacilla*, from the other soft-bill'd small birds, which he styles *Sylvia*. They are included among the *Motacilla* of LINNÆUS, and *Ficedula* of *Briffon* III. part II. 369.

Ex.

BILL, slender and weak.

NOSTRILS, small, sunk.

TONGUE, cloven.

FEET, the exterior toe joined at the under part of the last joint to the middle toe.

LII. WARBLERS.

Red-breast, *Br. Zool. fol. tab. S.*

Ex.

Inhabits

Inhabits all parts of the world, except the *Arctic*: The most melodious of the smaller *genera*: Insectivorous, seminivorous, delight in woods and bushes. Their pace hopping. *Motacilla* of LINNÆUS, *Ficedula* of Brisson III. part II. 369. LINNÆUS has XLIX species, Brisson LXXIII.

LIII. MANAKIN. BILL, short, strong, and hard, slightly incurvated.

NOSTRILS, naked.

TONGUE.

TOES, the middle closely united with the outmost as far as the third joint.

TAIL, short.

Ex Manakins, EDW. CCLXI.

Inhabits *South America* only.

Pipra of LINNÆUS, and *Manacus* of Brisson IV. 442. LINNÆUS enumerates XIII species, Brisson XIII.

Pipra, a *πῑπρα*, a certain bird, mentioned by *Aristotle*, *hist. an. lib.* IX. C. I. *Manacus* from the *Dutch*, *Manakin*, the name they bear in *Surinam*.

LIV. TITMOUSE BILL, strait, a little compressed, strong, hard, and sharp pointed.

NOSTRILS, round, and covered with bristles reflected over them.

TONGUE, as if cut off at the end, and terminated by three or four bristles.

TOES, divided to their origin; back toe very large and strong.

Titmice,

P A S S E R I N E.

31

Titmice, *Br. Zool. fol. tab. W. Br. Zool. I. tab. LVII.* a restless flitting race; most prolific; insectivorous, germinivorous, pugnacious.

Ex.

Inhabit *Europe* and *America*.

Parus of LINNÆUS and *Briffon* III. part II. 539. LINNÆUS has XIV. *Briffon* XVIII species. *Parus*, from *Pario*, because it lays many eggs.

BILL, short, broad at the base, small at the point, and a little bending. LV. SWALLOW.

NOSTRILS, open.

TONGUE, short, broad, and cloven.

LEGS, short.

TAIL, forked; Wings, long.

Inhabits the universe, even as far as *Hudson's Bay*.

Swallow, *Br. Zool. fol. tab. Q. Br. Zool. I. tab. LVIII.* Swift, much on wing, insectivorous, migratory or torpid during winter, twittering, forerunners of summer.

Ex.

Hirundo of LINNÆUS and *Briffon* II. 485. LINNÆUS has XII species, *Briffon* XVII.

BILL, very short, hooked at the end, and very slightly notched near the point.

LVI. GOAT-SUCKER.

NOSTRILS, tubular, and a little prominent.

MOUTH, vastly wide: On the edges of the upper part, between the bill and the eyes, seven stiff bristles.

TONGUE, small, entire at the end.

I

LEGS,

P A S S E R I N E.

LEGS, short, feathered before as low as the toes.

TOES, joined by a strong membrane as far as the first joint. Claw of the middle toe broad-edged and ferrated.

TAIL, consists of ten feathers, and is not forked.

Inhabits *Europe, Asia, and America.*

Flies by night; insectivorous, sonorous, migratory. Has much of the nature of the Swallow.

Ex. Goatfucker, *Br. Zool. fol. tab. R. Br. Zool. I. tab. LIX. Caprimulgus* of LINNÆUS, *Caprimulgus* and *Tette-chèvre* of Briffon II. 470. LINNÆUS has only II species, Briffon VI. *Caprimulgus* and Αἰγιοθῆλης of the Ancients, from a vulgar notion that they sucked the teats of Goats.

ORDER

ORDER VI.

STRUTHIOUS.

Very great and heavy Bodies. Wings, imperfect; very small, and useless for flight, but assistant in running. Flesh coarse, and hard of digestion.

STRUTHIOUS is a new coined word to express this order; for these birds could not be reduced to any of the LINNÆAN divisions.

BILL, large, bending inward in the middle of the upper mandible, marked with two oblique ribs, and much hooked at the end. LVII. DODO.

NOSTRILS, placed obliquely near the edge, in the middle of the bill.

LEGS, short, thick, feathered a little below the knees.

TOES, three forward, one backward.

Dodo, EDW. CCXCIV.

Inhabits the isles of *France* and *Bourbon*.

Didus of LINNÆUS, and *Raphus* of Brissón, V. 14. only 1. species.

LVIII. OSTRICH BILL, small, sloping, a little depressed.

Small WINGS, unfit for flight.

LEGS, long, strong, naked above the knees.

Ex.

Ostrich and Caffowary, *Wil. Orn.* tab. XXV.

Inhabits *Asia, Africa*, and the lower parts of *South America*.

Struthio of LINNÆUS and *Briffon* V. 3. III species.

DIV. II. WATER-FOWL.

ORDER VII. With CLOVEN FEET.

VIII. With PINNATED FEET.

IX. With WEBBED FEET.

Most migratory, shifting from climate to climate, from place to place, in order to lay their eggs, and bring up their young in full security: the thinly inhabited north their principal breeding place; returning at stated periods, and, in general, yielding to mankind delicious and wholesome nutriment. All the *Cloven-footed*, or mere Waders, lay their eggs on the ground. Those with *pinnated feet* form large nests, either in the water, or near it. From the first, we must except the *Heron* and the *Night-Heron**, which build in trees.

All the Web-footed fowl either lay their eggs on the ground, or on the shelves of lofty cliffs; and none perch, except the *Corvora*, *Shugg*, and one or two species of Ducks.

* Night Raven, *Raii Syn. av.* 99.

All the Cloven-footed Water-fowl have long necks and long legs, naked above the knees, for the convenience of wading in waters in search of their prey. Those that prey on fish have strong bills. Those that search for minute insects, or worms that lurk in mud, have slender weak bills, and olfactory nerves of most exquisite sense; for their food is out of sight.

As the name implies, their toes are divided, some to their origin; others have, between the middle toe and outmost toe, a small membrane as far as the first joint. Others have both the exterior toes connected to the middlemost in the same manner; and, in a few, those webs reach as far as the second joint; and such are called *Semipalmati*.

Of the Web-footed fowl, the *Flamingo*, the *Avesetta*, and *Courier*, partake of the nature of both the Cloven and Web-footed orders; having webbed feet, long legs, naked above the knees, and long necks. The other Web-footed Water-fowl being very much on the element, have short legs, placed far behind, and long necks; and, when on land (by reason of the situation of their legs) an awkward waddling gate.

The make of the Cloven-footed Water-fowl is light, both as to skin and bones; that of the Web-footed, strong.

ORDER VII.

CLOVEN-FOOTED.

BILL, long, broad, flat, and thin, the end widening into a circular form like a spoon.

LIX. SPOON-BILL.

NOSTRILS, small, placed near the base.

TONGUE, small and pointed.

FEET, semipalmated.

Spoon-bill, *Wil. orn. tab. 52. Br. Zool. II. App.*

Ex.

Inhabits *Europe, South America, and the Philippine Islands* *.

Breeds in high trees; feeds on fish, and water-plants; can swim.

Platalea of LINNÆUS, and *Platea* of Brisson V. 351. Each have III species.

BILL, bending down at the point, with a horn, or with a tuft of feathers erect near the base of the bill.

LX. SCREAMER.

NOSTRILS, oval.

TONGUE.

TOES, divided almost to their origin, with a very small membrane between the bottoms of each.

* *Voy. de Sonnerat, 89.*

CLOVEN-FOOTED.

Ex.

Anhima *Marcgrave* 215.Inhabits *South America*.*Palamedea* of LINNÆUS, *Anhima* and *Cariama* of Briffon V. 518.

I call it Screamer, from the violent noise it makes. Only two species.

LXI. JABIRU.

BILL, long, and large, both mandibles bending upwards; the upper, triangular.

NOSTRILS, small.

No TONGUE? *Marcgrave*.

TOES, divided.

Ex.

Jabiru guacu *Marcgrave* 200. 201.Inhabits *South America*.*Myiæria* of LINNÆUS, from *Muxrup*, a snout. *Ciconia* of Briffon V.

371. Only one species.

LXII. BOAT-BILL.

BILL, broad, flat, with a keel along the middle, like a boat reversed.

NOSTRILS, small, lodged in a furrow.

TONGUE.

TOES, divided.

Ex.]

Tamatia *Marcgrave* 208. 209. *Brown's Zool.* 92. tab. XXXVI.Inhabits *South America*.*Cancroma* of LINNÆUS, from their feeding on Crabs, who has II species; the *Coclearius* of Briffon V. 206. who has the same number.

BILL,

BILL, long, strong, sharp pointed.

NOSTRILS, linear.

TONGUE, pointed.

TOES, connected as far as the first joint by a membrane; back toe large.

LXIII. HERON.

Crested Heron, *Br. Zool. fol. tab. A.*

Ex.

Female Heron, *Br. Zool. II. tab. LXI.*

Inhabits every continent.

Ardea of LINNÆUS. *Ardea*, *Ciconia*, and *Balearica* of Briffon V.

361. 391. 511. LINNÆUS has XXVI species, Briffon LX.

BILL, strong, thick, strait, compressed, the upper mandible composed of several pieces.

LXIV. UMBRE.

Brown's Zool. 90. tab. XXXV.

Ex.

Inhabits *Senegal* and the South of *Africa*.

Scopus of Briffon, who has a single species. He calls it *Scopus*, from *σκια*, a shade; and *Ombrette* from the general deep brown of its plumage.

BILL, long, thick at the base, wholly incurvated. EYES, lodged in the base.

LXV. IBIS.

FACE, naked.

NOSTRILS, linear.

TONGUE, short and broad.

TOES, connected at the base by a membrane.

C L O V E N - F O O T E D .

Ex. Red Curlew *Catesby Carol. I. LXXXIV.* White-headed *Ibis, Ind. Zool. tab. X.*

Inhabits *Europe, Asia, and America.*

Tantalus of LINNÆUS, *Numenius* of *Briffon V. 311.* LINNÆUS has VII species. *Briffon* mixes them with the genuine Curlews, and has in all XIV.

LXVI. CURLEW. BILL, long, slender, incurvated.

FACE, covered with feathers.

NOSTRILS, linear, longitudinal, near the base.

TONGUE, short, and sharp pointed.

TOES, connected as far as the first joint by a strong membrane.

Ex. Curlew *Br. Zool. II. tab. LXIII.*

Inhabits *Europe, America, the Philippine Isles, and New Holland.*

Scolopax of LINNÆUS, *Numenius* of *Briffon V. 311.* LINNÆUS has IV species of genuine Curlews.

LXVII. SNIPE. BILL, two inches long and upwards; slender, strait, and weak.

NOSTRILS, linear, lodged in a furrow.

TONGUE, pointed, slender.

TOES, divided, or very slightly connected; back toe very small.

Ex. Woodcock, *Br. Zool. II. tab. LXV.*

Inhabits *Europe, Asia, and America.*

Scolopax of LINNÆUS, *Limosa* and *Scolopax* of *Briffon V. 261. 292.*

LINNÆUS reckons XIV species, exclusive of the Curlews.

Briffon XIII. Woodcock being the name of a species inhabiting

CLOVEN-FOOTED.

41

biting woods, I change it to the more comprehensive 'one of *Snipe*, which signifies a long bill.

BILL, strait, slender, and not an inch and a half long.

NOSTRILS, small.

TONGUE, slender.

TOES, divided; generally the two outmost connected at bottom by a small membrane.

Parr Br. Zool. II. tab. LXXI.

Inhabits all the quarters of the world; but in greatest plenty in the Northern.

Tringa of LINNÆUS; *Vanellus*, *Arenaria*, *Glareola*, and *Tringa* of Briffon V. 94. 132. 141. 177. including XXXV species.

LXVIII. SAND-PIPER.

Ex.

BILL, strait, as short as the head.

NOSTRILS, linear.

TONGUE.

TOES. Wants the back toe.

Dotterel Br. Zool. II. tab. LXXIII.

Charadrius of LINNÆUS, *Pluvialis* of Briffon V. 43. and *Himantopus* and *Ostralega* 33. and 38. LINNÆUS has XII. Cb. Briffon XV. Pl. II. *Himan*.

LXIX. PLOVER.

Ex.

BILL, long, compressed, the end cuneated.

NOSTRILS, linear.

TONGUE, scarce a third the length of the bill.

TOES, only three; the middle joined to the exterior by a strong membrane.

LXX. OYSTER-CATCHER.

Ex.

Sea-Pie, *Br. Zool. fol. tab. D. 2. Br. Zool. II. tab. LXXIV.*

Inhabits *Europe, North America*, and the eastern coast of *New Holland*. The bill calculated to raise limpets, oysters, and other shells from the rocks.

Hæmatopus of LINNÆUS, *Ostralega* and *L'Huitrier* of *Briffon V. 38.*

Only one species.

LXXI. JACANA. BILL, slender, sharp pointed; thickest towards the end; the base carunculated.

NOSTRILS, short, sub-ovated, placed in the middle of the bill.
TONGUE.

WINGS, armed on the front joint with a sharp, short spur.

TOES, four on each foot, armed with very long and strait sharp pointed claws.

Ex.

Spur-winged Water Hen. EDW. CCCLVII.

Parra of LINNÆUS, *Jacana* of *Briffon V. 122.* LINNÆUS has only III. genuine species, *Briffon V.* I retain the *Brasilian* name *Jacana*. Is not the *Impios PARRÆ recinentis omen* of *Horace*, which was probably some small bird. *Vide Pliny, lib. X. c. 33.*

LXXII. PRATIN.
COLE.

BILL, short, strong, strait, hooked at the end.

NOSTRILS, near the base, linear, oblique.

TONGUE.

TOES, long, slender, base of each connected by a very small membrane.

TAIL, forked; twelve feathers.

Pratincola,

CLOVEN-FOOTED.

43

Pratincola, *Kramer Austr.* 382.

Ex.

Inhabits *Southern Europe*.

Pratincola, or inhabitant of meadows, a name given it by Dr. *Kramer*, and adopted by me; placed by LINNÆUS with the *Hirundo*, by *Briffon* among his *Glareolæ*.

BILL, slender, a little compressed, and slightly incurvated.

LXXIII. RAIL.

NOSTRILS, small.

TONGUE, rough at the end.

BODY, much compressed.

TAIL, very short.

Water-Rail, *Br. Zool.* II. tab. LXXV.

Ex.

Inhabits *Europe, Asia, and America*.

Rallus of LINNÆUS, who places it among others very different, such as the Land-Rail, &c. *Briffon* calls the genus *Rallus*, but mixes with it others of another genus.

BILL, strong, thick, a little convex: upper of the upper mandible lodged in a corneous sheath. Sometimes elevated and open in front: at other times closely applied to the bill; reaching beyond the edges of the mandible.

LXXIV.
SHEATH-BILL.

NOSTRILS, small: just appearing out of the sheath.

ORBITS, naked, granulated.

WINGS, armed at the second flexure with a hard knob.

LEGS and TOES, thick, gallinaceous. Toes edged with a thick membrane. The middle toe connected to the next by

CLOVEN-FOOTED.

by a web, as far as the first joint. CLAWS, blunt, guttered below.

TONGUE, sagittal, blunted at the point.

A new genus. Frequents watry places in *New Zeland* and *Statenland*.

LXXV. GALLI- BILL, thick at the base, sloping to the point; the upper mandible
NULE. reaching far up the forehead, and not corneous.

BODY, compressed.

WINGS, short and concave.

TOES, long, divided to their origin.

TAIL, short.

Ex.

Water-Hen, *Br. Zool. fol. tab. L. I. Br. Zool. II. tab. LXXVII.*

Inhabits *Europe, Asia, and America.*

Fulica of LINNÆUS, *Gallinula* VI. and *Porphyrio* V. 522. of *Briffon*, who has III species of the first, and X of the last. In Bill and Legs, the *Land-Rail* agrees with this genus; but, with us, differs in its manners, by residing in dry places. But, as it migrates at approach of winter, it may, in warmer climates, during the season, inhabit fenny tracts, to which the form of its legs are adapted.

ORDER

O R D E R VIII.

With PINNATED FEET.

BILL, strait, slender.

NOSTRILS, minute.

TONGUE.

BODY and LEGS, in every respect formed like the Sand-piper.

TOES, furnished with scalloped membranes.

Scallop-toe'd Sand-piper, *Br. Zool. fol. tab. E. Br. Zool. II. tab.*

LXXVI.

Its manners, &c. unknown.

Inhabits *Europe* and *North America*.

LINNÆUS places it among the *Tringæ*; *Briffon* very judiciously forms a new genus, under the name of *Phalaropus*, from the scallops on the toes, like the *φαλαρίς*, or Coot.

LXXVI. PHALAROPE.

Ex.

BILL, short, strong, thick at the base, sloping to the end; the base of the upper mandible rising far up the forehead; both mandibles of equal length.

LXXVII. COOT.

NOSTRILS,

NOSTRILS, incline to oval, narrow, short.

TONGUE.

BODY, compressed. WINGS, short.

TOES, long, furnished with broad scalloped membranes.

TAIL, short.

Ex.

Coot, *Br. Zool. fol. tab. F. Br. Zool. II. tab. LXXVII.*

Inhabits *Europe, Asia, and Africa.*

Continues much on the water, makes a large nest of water-plants, lays six or seven eggs. In winter, oftentimes are seen in great flocks on arms of the sea.

Fulica of LINNÆUS, and *Briffon* VI. 23. LINNÆUS has only II species, for he mixes other birds with them. *Briffon* has II.

LXXVIII.
GREBE.

BILL, strong, slender, sharp pointed.

NOSTRILS, linear.

TONGUE, slightly cloven at the end.

BODY, depressed. FEATHERS, thick-set, compact, and very smooth and glossy.

TAIL, none. WINGS, short.

LEGS, placed very far behind, very thin, or much compressed; doubly ferrated behind.

TOES, furnished on each side with a broad, plain membrane.

Ex.

GREBE, *Br. Zool. fol. tab. K. Br. Zool. II. tab. LXXVIII.*

Congenerous birds, found in most countries; north as high as *Hudson's-Bay*, and south as far as *lat. 48. 30. and long. 58. 7. east.*

PINNATED FEET.

47

east *. LINNÆUS mixes his birds of this genus with web-footed birds, such as *Divers* and *Guillemots*, by the general name of *Colymbi*. *Briffon* VI. 33. very judiciously separates them, and has under the same name XI species.

* *Cook's Voy.* i. 48. *Forster's* i. 115.

L

ORDER

ORDER IX.

W E B - F O O T E D.



With LONG LEGS.

LXXIX. AVO-
SET.

BILL, long, slender, very thin, and bending considerably upwards.

NOSTRILS, narrow and pervious.

TONGUE, short.

FEET, palmated; the webs deeply semilunated between each toe;
back toe very small.

Ez:

Avosetta, Br. Zool. fol. tab. G. Br. Zool. II. tab. LXXX.Inhabits *Europe*, *North America*, and the western coast of *New Holland* *.*Recurvirostra* of LINNÆUS, *Avosetta* of Brisson VI. 537. Two species.LXXX. COU-
RIER.

BILL, short, strait.

NOSTRILS.

TONGUE.

LEGS, long. THIGHS, short. FEET, palmated; has a back toe.

* *Dampier*, iii. 85.

Trochilus, vulgo Corrira Aldr. av. III. 288. Wil. orn. tab. LX.

Ex.

Inhabits *Italy*.

Corrira of *Briffon* VI. 542. Only one species, and that probably never observed since the days of *Aldrovandus*, who is the only writer who seems to have seen it.

BILL, thick, large, bending in the middle, forming a sharp angle, the higher part of the upper mandible carinated; the lower, compressed. The edges of the upper mandible sharply denticulated; of the lower, transversely fulcated. LXXXI. FLAM-MANT.

NOSTRILS, covered above with a thin plate, pervious, linearly longitudinal.

TONGUE, cartilaginous, and pointed at the end; the middle muscular, base glandular, on the upper part aculeated.

NECK, very long.

LEGS and THIGHS, of a great length.

FEET, webbed; the webs extend as far as the claws, but are deeply femilunated.

BACK TOE, very small.

Flamingo, *Catesby Carol. I. LXXIII.*

Ex.

Inhabits *South America, Africa*, and rarely the *South of Europe*.

Phœnicopterus of LINNÆUS. Only one species.

W E B - F O O T E D.



With S H O R T L E G S.

LXXXII. ALBATROSS.

BILL, strong, bending in the middle, and hooked at the end of the upper mandible. That of the lower mandible abrupt, and the lower part inclining downwards.

NOSTRILS, opening forward, and covered with a large convex guard.

TONGUE.

TOES, no back toe.

Ex.

Albatross, EDW. LXXXVIII.

Inhabits the islands and seas within the Tropics, and as far south as lat. 67. 15. long. 39. 35. east *. Two or three species have been added to this genus.

Diomedea exulans of LINNÆUS, *Albatross* of Brisson VI. 127.

LXXXIII. AUK. BILL, strong, thick, convex, compressed.

NOSTRILS, linear, placed near the edge of the mandible.

TONGUE, almost as long as the bill.

TOES, no back toe.

Ex.

Puffin, *Br. Zool. fol. tab. H.*

Great Auk, *Br. Zool. II. tab. LXXXI.*

Inhabits the northern parts of *Europe*, *Asia*, and *America*; gregarious in general; lays only one egg; these, the *Grebe*, *Divers*, and *Penguins*, while on land, seldom move much.

* Cook's Voy. i. 43.

W E B - F O O T E D.

51

Alca of LINNÆUS, *Fratercula* and *Alca* of Brisson VI. 81. 85.

LINNÆUS has V. species, *Brisson* IV. viz. I. of the *Fr.* or *Puffin*, III of the *Alca*, or *Auk*.

BILL, slender, strong, pointed, the upper mandible slightly bending towards the end; base covered with short soft feathers. LXXXIV. GUILLE-
LEMOT.

NOSTRILS, lodged in a hollow near the base.

TONGUE, slender, almost the length of the bill.

TOES, no back toe.

Guillemot, *Br. Zool. fol. tab. H. 3.*

Ex.

Lesser Guillemot, *Br. Zool. II. tab. LXXXII.*

Inhabits the same places with the former, and lays only one egg.

LINNÆUS classes this genus with the *Colymbi*. The *Uria* of *Brisson* VI. 70. who has IV. species.

BILL, strong, straight, pointed, upper mandible the longest; edges of each bending inwards. LXXXV. DIVER.

NOSTRILS, linear; the upper part divided by a small cutaneous appendage.

TONGUE, long and pointed, serrated at each side near the base.

LEGS, very thin and flat.

TOES, the exterior the longest; the back toe small, joined to the interior by a small membrane.

TAIL, short; consists of twenty feathers.

Great Northern Diver, *Br. Zool. fol. tab. K. 2.*

Ex.

Imber, *Br. Zool. vol. II. tab. LXXXIV.*

Inhabits the north of *Europe*, *Asia*, and *America*.

Colymbus

W E B - F O O T E D.

Colymbus of LINNÆUS, and *Mergus* of Brisson VI. 104: The last has VI species. LINNÆUS mixes with this genus *Grebes* and *Guillemots*.

LXXXVI. SKIMMER. BILL, greatly compressed; lower mandible much longer than the upper.

NOSTRILS, linear and pervious.

TONGUE.

TOES, a small back toe.

TAIL, a little forked.

Ex. Cutwater, *Catesby Carol. I. tab. XC.*

Inhabits *India* and *America*.

Rynchops of LINNÆUS. *Rynchopsalia* of Brisson VI. 223. I. species.

Rynchops, from *ρυγχος*, a bill, and *κοπτειν*, to cut; the upper mandible being as if cut. I call it *Skimmer*, from the manner of its collecting its food with the lower mandible, as it flies along the surface of the water.

LXXXVII. TERN BILL, strait, slender, pointed.

NOSTRILS, linear.

TONGUE, slender and sharp.

WINGS, very long.

TOES, a small back toe.

TAIL, forked.

Ex. Great Tern, *Br. Zool. fol. tab. L**.

Little Tern, *Br. Zool. II. tab. XC.*

Clamorous,

Clamorous, much on the wing, gregarious, lays four eggs on the ground.

Inhabits *Europe*, and *America*, *North* and *South*.

Sterna of LINNÆUS, and *Briffon* VI. 202. LINNÆUS has VII species, *Briffon* the same.

BILL, strong, strait, but bending down at the point; on the under part of the lower mandible an angular prominency.

LXXXVIII.
GULL.

NOSTRILS, oblong and narrow, placed in the middle of the bill.

TONGUE, a little cloven.

BODY, light; WINGS, long.

LEGS, small, and naked above the knees; back toe small.

Great Black and White Gull, *Br. Zool. fol. tab. L.*

Ex.

Winter Mew, *Br. Zool. II. tab. LXXXVI.*

An universal genus; much on the wing, clamorous, hungry, piscivorous, carnivorous, gregarious; lays four or five eggs, generally on high cliffs.

Larus of LINNÆUS, and *Larus* and *Stercoraria* of *Briffon* VI. 153.

The first has XI species, the last XVIII.

BILL, strait; but hooked at the end.

LXXXIX.
PETREL.

NOSTRILS, cylindric, tubular.

TONGUE.

LEGS, naked above the knees.

BACK TOE, none; instead, a sharp spur pointing downwards.

Fulmar, *Br. Zool. fol. tab. M. 2.*

Ex.

Stormy Petrel, *Br. Zool. IV. tab. XCI.*

Inhabits

Inhabits all parts of the ocean; but the species most numerous in the high southern latitudes, as the Auks are in the northern. Many have the faculty of spurting an oily liquid out of their stomachs.

Procellaria of LINNÆUS, *Procellaria* and *Puffinus* of Brisson. LINNÆUS has VI species, *Brisson* VII.

- XC. MERGANSER.** BILL, slender, a little depressed, furnished at the end with a crooked nail. Edges of each mandible very sharply serrated. NOSTRILS, near the middle of the mandible, small and sub-ovate. TONGUE, slender. FEET, the exterior toe longer than the middle.

Ex.

Goosander, *Br. Zool. fol. tab. N^o.*

Red-breasted Goosander, *Br. Zool. II. XCIII.*

Great divers, feed on fish.

Mergus of LINNÆUS, and *Merganser* of Brisson, VI. 230. LINNÆUS has VI species, *Brisson* VII. The name, *Merganser*, or Diving-Goose.

Inhabits the North of Europe, and North America.

- XCI. DUCK.** BILL, strong, broad, flat, or depressed; and commonly furnished at the end with a nail. Edges marked with sharp *Lamellæ*. NOSTRILS, small, oval. TONGUE, broad, edges near the base fringed. FEET, middle toe the longest.

Ex.

Br. Zool. II. tab. XCVII.

Found in all climates.

Anas:

Anas of LINNÆUS, who has XLV species. *Briffon* divides this genus into *Anser* and *Anas*; has XVI of the first, and XLIII of the second.

BILL, strong, strait, bending a little towards the point.

XCII. PINGUIN.

NOSTRILS.

TONGUE, covered with strong sharp spines, pointing backwards.

WINGS, very small, pendulous, useless for flight; covered with mere flat shafts.

BODY, covered with thick short feathers, with broad shafts, placed as compactly as scales.

LEGS, short and thick, placed quite behind.

TOES, four standing forward; the interior loose, the rest webbed.

TAIL, very stiff, consisting only of broad shafts.

Patagonian Pinguin, *Pb. Tr.* vol. LVIII. 91. tab. V.

Ex.

Inhabits an isle near the *Cape of Good Hope*, on the coasts of *New Guinea* *, the isle of *Desolation*, south of the *Cape*, the southern parts of *South America*, and the seas among the ice as high as south lat. 64. 12. long. 38. 14. east †. Lives much at sea. The wings act as fins. On land burrows. Are analogous to Seals.

Diomedea demersa and *Phaethon demersus* of LINNÆUS. *Spheniscus* and *Cataractis* of *Briffon* VI. 96. and 102. I call it PINGUIN, the name first given it by the *Dutch* voyagers, a *Pinguedine*.

* *Voy. de Sonnerat.* 179.

† *Cook's Voy.* i. 38.

XCIII. PELICAN. BILL, long and strait; the end either hooked or sloping.
 NOSTRILS, either totally wanting, or small, and placed in a furrow, that runs along the sides of the bill.
 FACE, naked.
 GULLET, naked, and capable of great distension.
 TOES, all four webbed.

Ex.

Pelican, EDW. XCII.
 Corvorant, *Br. Zool. fol. tab. 7. 1. Br. Zool. II. tab. CII.*
 Congenerous birds, inhabit all parts of the globe.
Pelicanus of LINNÆUS, who has VIII species. *Briffon* divides this genus into *Sula*, *Pbalarocorax*, and *Onocrotalus*, and forms out of them XII species, VI. 494. 511. and 519. All feed on fish. The *Corvorants* sit, and often breed in trees.

XCIV. TROPIC, BILL, compressed, slightly sloping down. Point sharp. Under mandible angular.
 NOSTRILS, pervious.
 TONGUE.
 TOES, all four webbed.
 TAIL, cuneiform: Two middle feathers extending for a vast length beyond the others.

Ex.

Tropic Bird, EDW. CXLIX.
 Inhabits within the *Tropics*. Flies very high.
Pbaetbon of LINNÆUS, from the great height it aspires to. *Lep-turus* of *Briffon*, from the slenderness of its tail, VI. 479.

BILL,

BILL, long, strait, sharp pointed.

XCV. DARTER.

NOSTRILS.

TONGUE.

NECK, of a great length.

FACE and GULLET, covered with feathers.

TOES, all four webbed.

Black-bellied *Anbinga*, *Ind. Zool. tab.* XII.

Ex.

Inhabits *Guinea*, *Ceylon*, and *South America*. Darts out its head either at its food, or at passengers that go by; whence the name.

Plotus of LINNÆUS, *Anbinga* of Briffon, VI. 476.

The intention of giving a plate to every genus of this work, was entirely superseded by the consideration of a NEW ORNITHOLOGY, undertaken by Mr. *John Latham*, of *Dartford*. In that comprehensive attempt, every species of bird will be fully described; and one or more figures will be given, explanatory of each genus: Mr. *Latham's* knowledge of the subject, and the labor he has bestowed on it, will doubtlessly render it worthy of the attention of the public.

W. H. B. J. C. O. T. H. W.

100-443887-100

1000, all four wheels.
 1000 and German covered with leather.
 1000, of a great length.
 1000.
 1000, all four wheels.
 1000, all four wheels.

[illegible]

1

2



CRESTED HOBBY.





WHITE COLLARED PARROT.

EXPLANATION

OF THE

P L A T E S.

Genus I. FALCON.

I.

CRESTED HOBBY.

F. with black head, cheeks, and hind part of neck. Head slightly crested. Back, and coverts of wing, black. Primaries and tail, of the same color, marked with numerous bars of white. Throat, white. Breast, thighs, and vent, ferruginous. Legs, yellow. Size of the *English* Hobby.

From *Surinam*. Preserved in the *British* MUSEUM.

Genus V. PARROT.

II.

WHITE-COLLARED PARROT.

P. with a red bill; blue head, cheeks, and chin; green neck, back, and wings. Neck half surrounded with a white collar, passing over the upper part towards the throat. Upper part of the breast

EXPLANATION OF

breast of a fine red; the lower, yellow: belly, blue: thighs, yellow and blue: tail, cuneated; yellow beneath.
Inhabits the isles of the *East Indies*?

III.

Genus XXII. JACAMAR.

CUPREOUS JACAMAR, *fig. 1.*ALCEDO GABULA, *Lin. Syst. 182.*

J. with a black bill: whitish throat: head, cheeks, wings, and tail, of a bluish green: breast, belly, and back, of a variable copper color, very rich and glossy.

Varies in some respects from that figured by Mr. EDWARDS, tab.

XXXIII. in having less green on the back; so probably is of another sex.

Size of a Lark.

Inhabits *Surinam*, and other parts of *South America*.

IV.

Genus XXVIII. CREEPER.

YELLOW-CHEEKED CREEPER.

Cr. with green head, back, wings, and tail: cheeks and throat, deep yellow: breast and sides of a yellowish green, marked with bluish spots: belly, yellow.

Size, inferior by half to the *English Creeper*.

Inhabits *Surinam*.

III

2

IV

1



1. CAPREOWS JACKAMAR 2. YELLOW-CHEEKED-CREEPER







RED-HEADED KING-FISHER.





1. GREEN TODY. 2. BROWN TODY.

THE PLATES.

61

Genus XXIII. KINGFISHER.

V.

RED-HEADED KINGFISHER.

K. with a red bill; near the base of the upper mandible, a white spot: head, and upper part of the neck, of an orange red: from each eye, towards the back, extends a purple line, terminating in a white spot; and on the inner side of that, one of black: chin, white: upper part of the back, a rich blue: the lower, light purple: coverts of wings, black, edged with blue: primaries, black: breast and belly, yellowish white: back, orange: legs, red.

Size, lesser than the common Kingfisher.

Inhabits *India*.

Genus XXV. TODY.

VI.

GREEN TODY, fig. 1.

TODUS VIRIDIS, *Lin. Syst.* 178.

T. with head, back, wings, and tail, of a fine green: throat, a rich crimson: breast and belly, of a pale yellow: vent, deeper.

Size of a Wren. The Green Sparrow of Mr. Edwards, tab.

CXX.

Inhabits *Jamaica*, and the hot parts of *America*.

BROWN

EXPLANATION OF

BROWN TODY, *fig. 2.*

T. with the whole upper part of a ferruginous brown: the coverts of the wings, crossed with a dusky bar: lower part of the body, olive, spotted with white: tail, ferruginous.

Size, larger than the former.

Inhabits the hot parts of *America*.

VII.

Genus XXVI. BEE-EATER.

INDIAN BEE-EATER.

MEROPS VIRIDIS, *Lin. Syst.* 182.

B. with head, and lower part of neck, of a fine light blue, bounded below by a line of black: a black line passes from bill through the eyes to the hind part of the head: hind part of head and neck, of an orange red: upper part of back, coverts of wings, secondaries, and tail, green: the middle part of the secondaries, of a reddish orange: lower part of back, of a light blue: breast and belly, of a yellowish green: tail, long; two middle feathers two inches longer than the others, and appear like mere shafts.

Nearly the size of a Redwing Thrush.

Inhabits *India*.

VIII.

Genus XXIX. HONEY-SUCKER.

YELLOW-FRONTED HONEY-SUCKER, *fig. 1.*

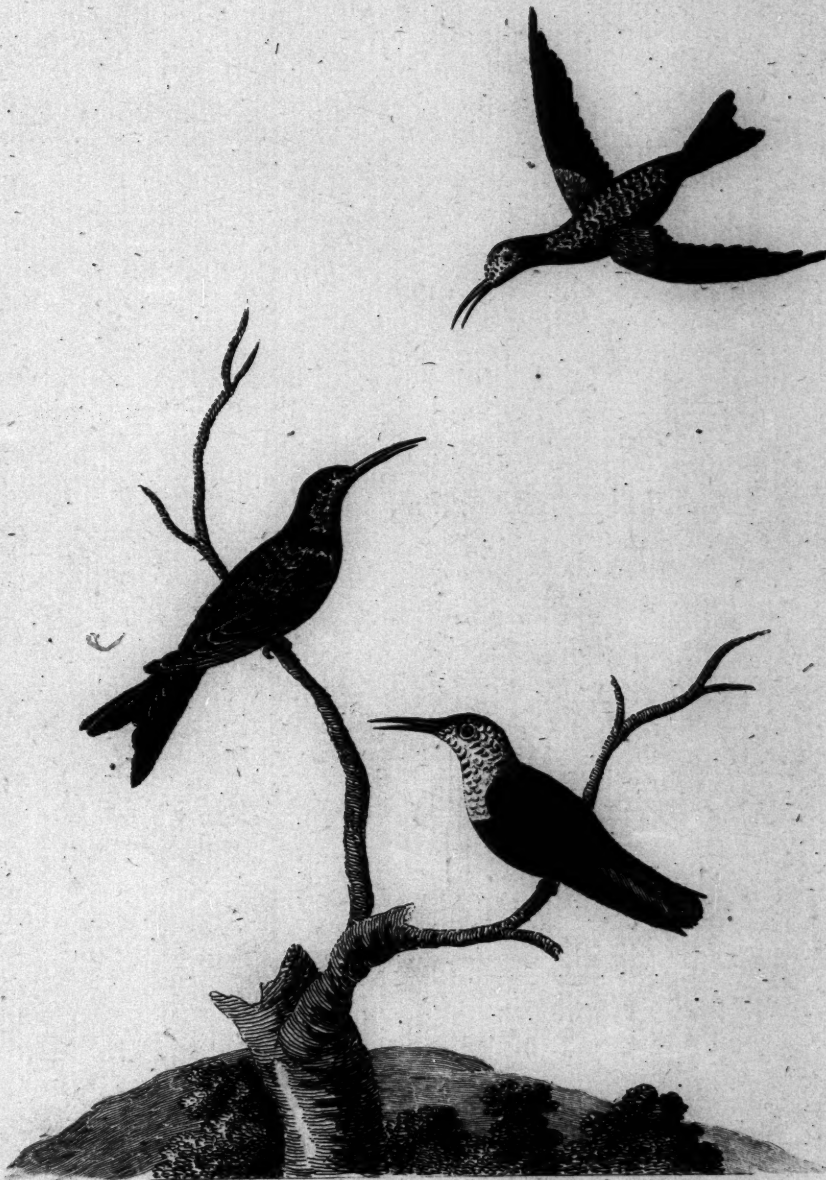
H. with a yellow forehead: green body and coverts of wings: black primaries and tail.

PURPLE-



INDIAN BEE EATER.





HONEYCREEPERS.







PURPLE CHATTERER.

PURPLE-CROWNED HONEY-SUCKER, *fig. 2.*

H. with a purple crown: green throat: rich deep blue collar round the whole lower part of the neck: back, green: wings, and forked tail, of a deep purple.

ORANGE-HEADED HONEY-SUCKER, *fig. 3.*

H. with an orange head: yellow throat and breast: deep brown belly and back: purple wings: bright ferruginous tail.

All very minute. Inhabitants of the hot parts of *America*.

Genus XLIII. CHATTERER.

IX.

COTINGA.

AMPELIS COTINGA, *Lin. Syst. 298.*

Ch. with head and upper part of the body, and coverts of wings, of a most splendid blue, deepest on the crown: belly and vent, of the same color: under side of the neck and breast, of a lovely purple: in some the breast is crossed with a band of the same blue with the upper part: primaries and tail, dusky.

Size of a Stare.

Inhabits *Surinam*, and other hot parts of *South America*.

N

Genus

EXPLANATION OF

x.

Genus LIII. MANAKIN.

CRESTED MANAKIN, *fig. 1.*PIPPA RUPICOLA, *Lin. Syst. 338.*

M. with a whitish bill: great round upright crest, of a fine orange color, crossed near the end of each feather with a darker line: neck, back, and whole under side, of the same vivid color. The feathers on the back end singularly, as if they had been cut off: and some of the feathers on the sides of the back, are loose and pointed. The primaries brown, marked with a white line: tail short, partly brown, partly orange.

Size of a Turtle Dove.

Inhabits *Surinam*.GOLDEN-HEADED MANAKIN, *fig. 2.*PIPPA ERYTHROCEPHALA, *Lin. Syst. 339.*

M. with a rich yellow head: scarlet shoulders and thighs: black body, wings, and tail.

Size of a Wren.

Inhabits *Surinam*.

xi.

Genus LXVI. CURLEW.

PYGMY CURLEW, *fig. 1.*

C. with the head, back, and coverts of the wings, mixed with brown, ferruginous, and white: primaries, dusky, edged with white:

x

30



1. CRESTED MANAKIN. 2. GOLDEN HEADED M.





DWARF CURLEW.





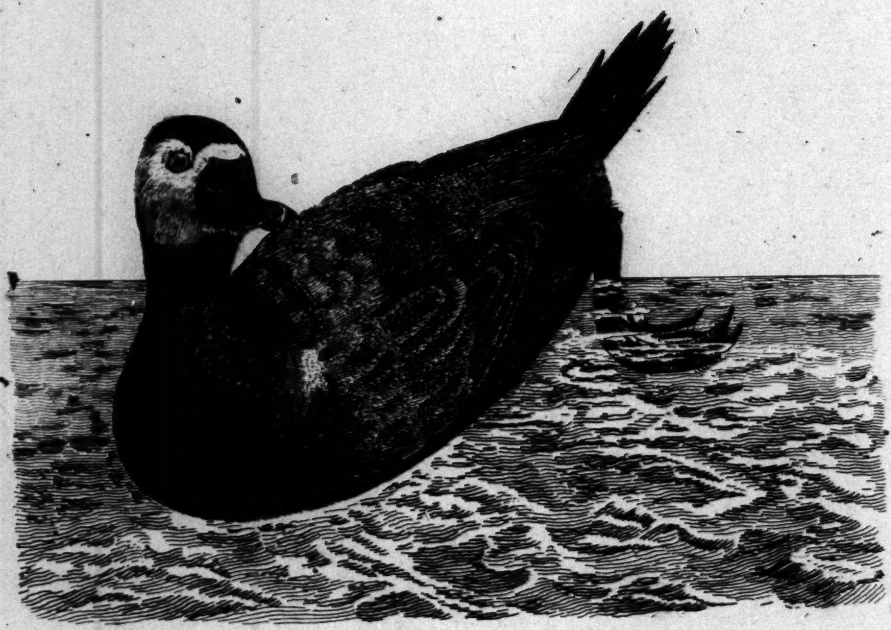
65
XII

41



LITTLE SANDPIPER.





SPANISH DUCK .

THE PLATES.

65

white: breast and belly, and rump, white: tail, dusky: the exterior feathers edged with white: bill and legs, black.

Size of a Lark.

Inhabits *Holland*. Sent to me by Doctor L. THEODORE GRO-
NOVIUS.

Genus LXVIII. SANDPIPER.

XII.

LITTLE SANDPIPER, *fig. 2. Br. Zool. II. N° 207.*

S. with head, upper part of the neck, back, and coverts of the wings, brown, edged with black, and pale rusty brown: breast and belly, white.

Lesser than a Hedge Sparrow.

Inhabits *Europe and North America.*

Genus XCI. DUCK.

XIII.

SPANISH DUCK.

ANAS VINDILA, *Lin. Syst. 205.*

D. with forehead, cheeks, chin, and hind part of the head, of a snowy whiteness: crown, black: neck, surrounded with a black collar: back and breast, bright ferruginous, crossed with narrow dusky lines: wings, pale brown, without a speculum: belly, whitish brown, spotted with black: tail, cuneiform, black: legs, bluish.

N 2

Size

EXPLANATION OF

Size of a Wigeon. Whistles like one.
 Inhabits *Spain* and *Barbary*. Presented to me by Sir *Hugh Williams*, baronet.

XIV.

Genus XCII. PINGUIN.

PATAOONIAN PINGUIN, *Pb. Tr.* Vol. LVIII. 91.

P. with a slender bill, slightly bending: head, hind and fore part of the neck, dusky: each side of the neck marked with a narrow stripe of bright yellow, pointing from the head to the breast, uniting beneath the dark color of the front of the neck, and fading away into the pure white of breast and belly: whole back, of a deep cinereous color, marked with numerous small carulean spots: outside of wings, black: inside, white: tail and legs, black.

Length, about three feet three inches. Weight, forty pounds*.

Inhabits *Falkland Islands*, *New Georgia*, the island of *Desolation*, (visited by Captain Cook, in his last voyage, south lat. $48\frac{1}{2}$. east longitude from *Greenwich* 70.) and *New Guinea*.

The measurement of that which I described in the *Philosophical Transactions*, is faulty, being taken from a stuffed skin too much distended. I correct it here, and add a figure of the bird, taken from life.

* *Forster's Voy.* ii. 528. To the places where the *Leopine Seals* are found, p. 535 of my *Hist. Quad.* add *Staten-land*, and the island of *Desolation*.

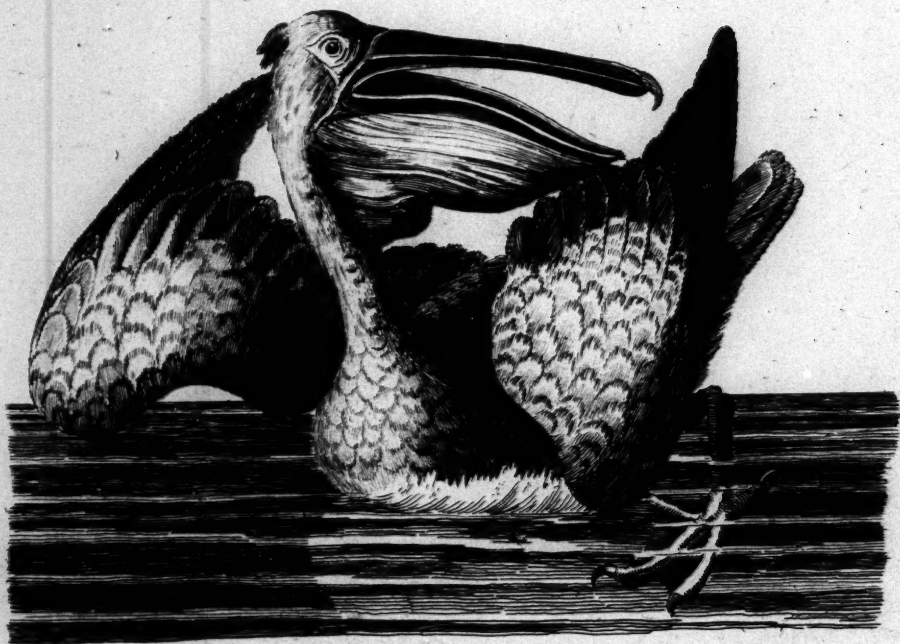
Genus



PATAGONIAN PINGUIN.







PELECAN.





FRIGAT PELECAN.

Genus XCH. P E L E C A N.

XV.

C O M M O N P E L E C A N.

P E L E C A N U S O N O C R A T A L U S, *Lin. Syst.* 215.

P. with the head slightly crested: plumage, white, tinged with a fine blossom color: the primaries, black: legs and feet, purplish: webs, dusky.

Size, sometimes double that of a Swan: bill, twenty inches long: extent of wings, eleven feet eight; *English* *.

Inhabits the *Danube*, in its passage through *Hungary*: abounds in *Africa* and *Asia*, in several parts: numbers about the *Caspian* sea; and it is not unknown on lake *Baikal*. Found also of a vast size in *New Holland*.

Genus the same.

XVI.

F R I G A T P E L E C A N.

P E L E C A N U S A Q U I L U S, *Lin. Syst.* 216.

P. with a slender bill, hooked at the end; under the lower mandible, a vast naked scarlet pouch, like a bladder, extending down the whole front of the neck. The uses of this pouch to this and the former species, is to convey food to their young: the common Pelecan, which often breeds in arid deserts, makes it a vehicle for water for its young brood. Color of the plumage of the male, a deep brown, or chocolate; the coverts of the wings lightest, and tinged with rust color: the longest feather in the tail,

* EDWARDS.

EXPLANATION, &c.

nineteen inches long: the middle, or shortest, only eight:
breast of the FEMALE, white.

Length, three feet.

Inhabits *Ascension Island*, the *West Indies*, some of the *Indian Islands*,
and *Easter Island*, in the south seas: hovers in the air with the
gentle motion of a kite: feeds on fish: darts on its prey as the
fish swim near the surface, but does not alight on the water:
will assault other birds, and make them cast up their prey; and
then catch it in the fall *.

* *Dampier. Campeatby Voy. 25.*



ERRATUM.

P. xxvi. l. 31, for *Pelican*, read *Pelecan*.

I N D E X.

A	Page	F	Page
ALBATROSS	50	Falcon	2
Ani	8	Feathers	viii
Auk	50	Finch	28
Avocet	48	Flammant	49
		Flight	x
		Flycatcher	28
		Frigat Pelecan	67
B		G	
Barbet	12	Gallinaceous ORDER	18
Bee-Eater	16	Gallinule	44
Beef-Eater	8	Goatsucker	31
Bill of Birds	i	Grakle	11
Boat-Bill	38	Grebe	46
Body of Birds	iii	Grofsbeak	27
Bunting	27	Grouse	21
Bustard	23	Guillemot	51
		Gull	53
C			
Cere	ii	H	
Chatterer	26	Head of Birds	i. ii
Cloven-footed Water-Fowl, or Waders	37	Heron	39
Cock	19	Honey-sucker	17
Columbine ORDER	24	Three Species described	62, 63
Coly	26	Hoopoe	16
Coot	45	Hornbill	7
Cotinga descr.	63		
Courier	48	I	
Creeper	16	Jabiru	38
Crow	9	Jagamar	14
Cuckoo	13	Jagana	48
Curaffo	20	Ibis	39
Curlew	40		
Pygmy	64	K	
Curucui	12	Kingsfisher	14
		Red-crowned	61
D		L	
Darter	57	Lark	28
Diver	51	Limbs of Birds	iv
Dodo	23		
Down	18		
Duck	54		
Spanish	65		
E		M	
Eggs	xvi	Manakin	

1 N D E X.

